PRELIMINARY & FINAL MAJOR SITE PLAN FOR

PROPOSED MIXED-USE BUILDING

BLOCK 8.17, LOT 15
TAX MAP SHEET #12
12010 LONG BEACH BOULEVARD
LONG BEACH TOWNSHIP, OCEAN COUNTY, NEW JERSEY

PROPERTY OWNERS WITHIN 200'

Ocean County — VARIANCE REPORT (200 Ft) — 1518 Long Beach Twp
05/30/25 Page: 1

Block Lot Qual	Property Location Additional Lot Additional Lot	Property Class	Owner Address City, State	Zip Code
8.17 15	12010 LONG BEACH BLVD	4A	JS PRO LLC 28 RODEO DRIVE WEST CREEK NJ	08092
8.17 17	3 W MAC EVOY LANE	2	WARSHOFSKY FAMILY TRUST ETAL 219 WINDSOR PLACE BROOKLYN NY	11215
8.17 18	5 W MAC EVOY LANE	2	GOLD, ADAM & GILLIAN 58 MAPLE AVENUE METUCHEN NJ	08840
8.17 19	7 W MAC EVOY LANE	2	MOLEN, CHRISTOPHER & CATHRYN 312 SAINT GEORGES PLACE WESTFIELD NJ	07090
8.17 20	9 W MAC EVOY LANE	2	BENDER JOINT REVOCABLE TRUST 3956 SAN PIETRO COURT PUNTA GORDA FL	33950
8.24 1	3 E HOLLY BANKS LANE	2	BARRY, RICHARD & DORIAN 43 INTERLAKEN DRIVE EASTCHESTER NY	10709
8.24 5	2 E MAC EVOY LANE	2	REGAN, PETER T JR & C M 57 BIRDIE WAY LAWRENCEVILLE NJ	08648
8.24 6	12101 LONG BEACH BLVD	2	O'HEA, MICHAEL & KATHLEEN 128 DWIGHT AVE HILLSDALE NJ	07642
8.29 5	7 W HOLLY BANKS LANE	2	BROWN, FRANCES F 7 W HOLLY BANKS LANE BEACH HAVEN DUNES, NJ	08008
8.29 6	5 W HOLLY BANKS LANE	2	DENNIS, ANTHONY P & KAREN L 303 E CENTRAL AVE PEARL RIVER NY	10965
8.29 7	3 W HOLLY BANKS LANE	2	SIDARI, KAREN A & FISHER, KENNETH W 481 STEVENS AVE RIDGEWOOD NJ	07450
8.29 8	12106 LONG BEACH BLVD	2	DEBAERE, GREGG T & MARLENE L 105 LANCASTER RD FREEHOLD NJ	07728
8.29 9	12102 LONG BEACH BLVD	2	AGOSTINO, ANNE A TRUST 62 RIVER ROAD BRIARCLIFF MANOR NY	10510
8.29 10	2 W MAC EVOY LANE	2	CORREIA, DEREK L & KELLY P 8 HOPES FARM LANE BEDFORD NY	10506
8.29 11	4 W MAC EVOY LANE	2	ALFONSO, REGINA 4 WEST MAC EVOY LANE LONG BEACH TWP NJ	08008
8.29 12	6 W MAC EVOY LANE	2	LUPCO, JOHN J & ELAINE A 2929 LINDA LN SINKING SPRING PA	19608
8.29 13	8 W MAC EVOY LANE	2	HAND, DAVID L & KATHLEEN N 13505 VIRGINIA WILLOW DR. FAIRFAX VA	22033
10.02 5	20 W UTAH AVE	2	MALINOWSKI, ERIC 899 WOOD AVE EDISON, NJ	08820
10.02 6	18 W UTAH AVE 7	2	WOLFE, KENNETH JORDON & CYNTHIA T PO BOX 2007 LONG BEACH TOWNSHIP NJ	08008
10.02 8	10 W UTAH AVE	2	SNYDER JOINT REVOCABLE TRUST 11815 TURKEY LANE NEW PORT RICHEY FL	34654
10.02 9	6 W UTAH AVE	2	SOBON,ROBERT & MARY 410 E 5TH STREET FLORENCE NJ	08518
10.02 10	12000 LONG BEACH BLVD	4A	ATKINSON, MARK D & AMY 34 CORNELL DR MANAHAWKIN NJ	08050
10.03 1	12005 LONG BEACH BLVD	4A	TAA PROPERTY LLC 12001 LONG BEACH BLVD LONG BEACH TWP NJ	08008
10.03 10.01	12001 LONG BEACH BLVD	1	TAA PROPERTY LLC 12001 LONG BEACH BLVD LONG BEACH TWP NJ	08008
10.06 4	17 W UTAH AVE	2	HOFMANN, GLENN & DEBRA A 3049 WOODLANE AVENUE OREFIELD PA	18069
10.06 5	15 W UTAH AVE	2	SMITH FAMILY TRUST 15 W UTAH AVE HAVEN BEACH, NJ	08008
10.06 6	7 W UTAH AVE	2	LEVEROCK, DAVID & ELENA 19 WALLEY AVE STATEN ISLAND NJ	10312
10.06 7	5 W UTAH AVE	2	FISHER CYNTHIA B 21089 ATLANTIC COAST CT LEWES DE	19958
10.06 8	11910 LONG BEACH BLVD	2	BELLA HOLDING LLC ATTN:FODA, RANDA 1939 MARLTON PIKE EAST CHERRY HILL NJ	08003
10.06 9	11902 LONG BEACH BLVD	4A	11902 LONG BEACH BL LLC % COOPERMAN 50 ROCKEFELLER PLZ FL 4 NEW YORK NY	10020
10.06 10	12 W NEVADA AVE 11	2	SOLAN, ADAM & MARISSA 12 W NEVADA AVENUE LONG BEACH TOWNSHIP NJ	08008

UTILITY CONTACTS

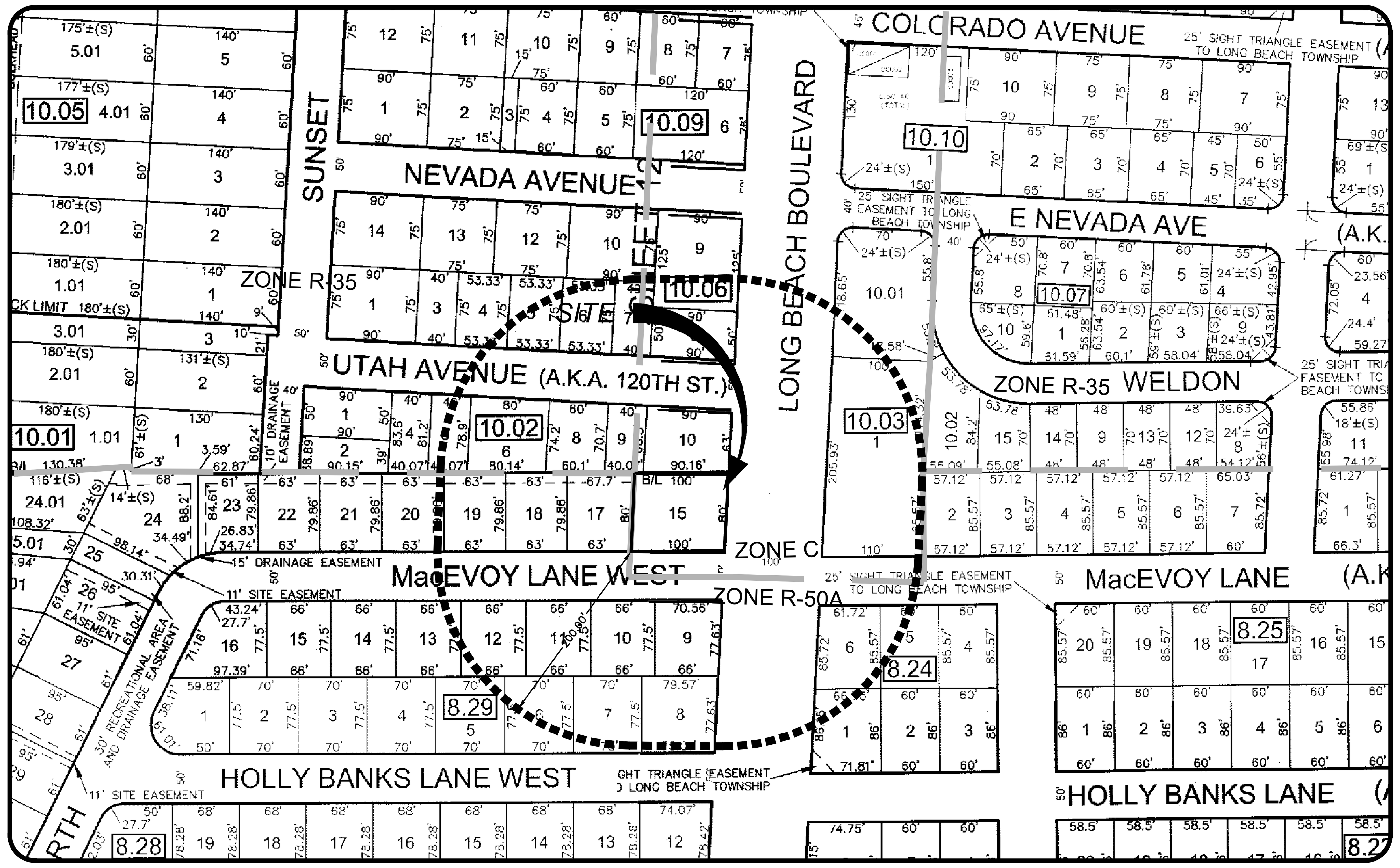
ATLANTIC CITY ELECTRIC
REAL ESTATE DEPARTMENT
5100 HARDING HIGHWAY, SUITE 399
MAYS LANDING, NEW JERSEY 08330

VERIZON
ENGINEERING DEPARTMENT
423 W WASHINGTON AVENUE,
FLOOR 2 PLEASANTVILLE, NEW JERSEY 08232

COMCAST
JOSH COSULICH
830 ROUTE 37 WEST
TOMS RIVER, NEW JERSEY 08755

NEW JERSEY NATURAL GAS
RIGHT OF WAY DEPARTMENT
1415 WYCKOFF ROAD
WALL, NEW JERSEY 07719

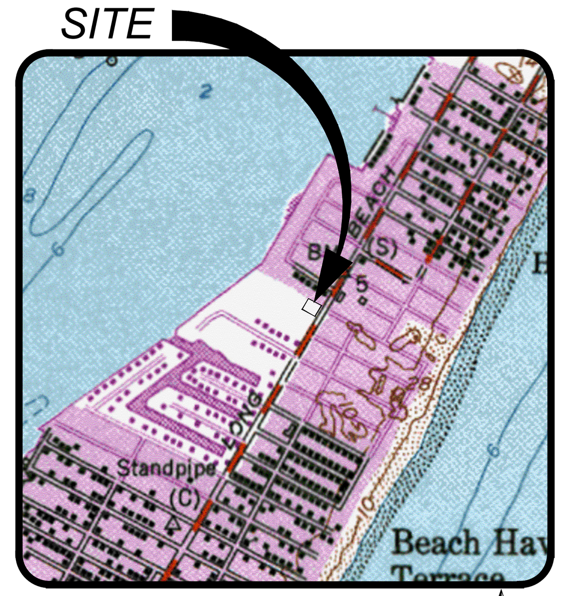
OCEAN COUNTY PLANNING BOARD
P.O. BOX 2191
TOMS RIVER, NEW JERSEY
08754-2191



TAX MAP

100 0 100 200
Scale: 1"=100'

ZONE
ZONE C - GENERAL COMMERCIAL ZONE
ZONE R-50A - SINGLE FAMILY RESIDENTIAL ZONE
ZONE R-35 - GENERAL RESIDENTIAL ZONE



USGS MAP

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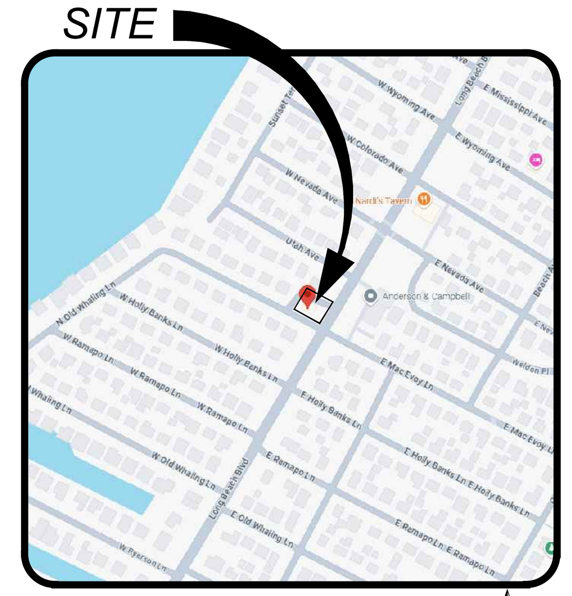
Scale: 1"=1000'



LOCATION MAP

500 0 500 1000
Scale: 1"=500'

EFFECTIVE FLOOD INSURANCE RATE MAP

1000 0 1000 2000
Scale: 1"=1000'

PRELIMINARY FLOOD INSURANCE RATE MAP

1000 0 1000 2000
Scale: 1"=1000'

LAND USE BOARD APPROVAL	
APPROVED BY THE LONG BEACH TOWNSHIP LAND USE BOARD	
BOARD CHAIRPERSON	DATE
BOARD SECRETARY	DATE
BOARD ENGINEER	DATE

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SEE SHEET C101 FOR PLAN NOTES

File: X:\Jobs\2462 – JS Pro Construction\25–2462–02 – 12010 Long Beach Boulevard_Long Beach Township, NJ\25246202CAD\dwg\C100 Title Sheet.dwg, --> C100 Title Sheet
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PROJECT INFORMATION

PROJECT NAME:
PROPOSED MIXED-USE BUILDING

PROJECT LOCATION:
BLOCK 8.17, LOT 15
12010 LONG BEACH BOULEVARD.
LONG BEACH TOWNSHIP,
OCEAN COUNTY, NJ

OWNER:
LSH HOLDINGS LLC
28 RODEO DRIVE
WEST CREEK, NJ 08092

APPLICANT:
LSH HOLDINGS LLC
28 RODEO DRIVE
WEST CREEK, NJ 08092

APPLICANT'S PROFESSIONALS

ARCHITECT:
HAND LINE ARCHITECT
128 BARTLETT AVENUE,
WEST CREEK, NJ 08092

SURVEYOR:
GRAVATT CONSULTING GROUP
414 LACEY ROAD
FORKED RIVER, NJ 08731

ATTORNEY:
RABAN & RABAN
11710 LONG BEACH BLVD.
LONG BEACH TOWNSHIP, NJ 08008

CALL BEFORE YOU DIG!
NJ ONE CALL.....800-272-1000
(at least 3 days prior to excavation)

INSITE Engineering • Surveying • Planning

InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
165 CHESTNUT STREET, SUITE 200, ALLENDALE, NJ 07401
20 N. MAIN STREET, SUITE 2B, MANAHAWKIN, NJ 08050
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DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
0	06/12/25	INITIAL RELEASE

SCALE: AS SHOWN	DESIGNED BY: JMW
DATE: 06/12/25	DRAWN BY: M-S
JOB #: 25-2462-02	CHECKED BY: DDC

☒ NOT FOR CONSTRUCTION
APPROVED BY:
☐ FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:
PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:
TITLE SHEET

SHEET NO:
C100

GENERAL SITE PLANTING

THE OWNER SHALL HAVE A SOIL ANALYSIS MADE AFTER COMPLETION OF THE ROUGH GRADING. THE CONTRACTOR SHALL INCORPORATE ALL SOIL AMENDMENTS AND FERTILIZERS DESCRIBED HEREIN. THE SOIL PREPARATION SPECIFIED BELOW SHALL BE ADJUSTED ACCORDING TO THE ANALYSIS, FOLLOWING APPROVAL FROM THE UNDERSIGNED.

A. WEED CONTROL FOR LAWN, SHRUB & GROUND COVER AREAS (EXCEPT SLOPES)
1. REMOVE ALL EXISTING WEEDS FROM SURFACE AND DISPOSE OFFSITE.
2. IRRIGATION IS TO BE INSTALLED WHERE NOTED ON PLAN ACCORDING TO SHOP DRAWINGS.
3. FERTILIZE ALL SHRUB/GROUND COVER AREAS. APPLY 10LBS. OF 16-20-0 COMMERCIAL FERTILIZER PER 1,000 SQ. FT. OR AS DIRECTED BY SOILS REPORT.
4. WATER ALL SHRUB/GROUND COVER AREAS FOR THREE (3) WEEKS TO GERMINATE WEED SEEDS. APPLY WATER AT LOW RATE TO AVOID EROSION.
5. LICENSED APPLICATOR SHALL APPLY SYSTEMIC WEED KILLER TO ALL PLANTING AREAS PER MANUFACTURER'S SPECIFICATIONS.

B. TOPSOIL PRESERVATION
TOPSOIL MOVED DURING THE COURSE OF CONSTRUCTION SHALL BE REDISTRIBUTED ON ALL REGRADED SURFACES. AT LEAST THREE (3) INCHES OF EVEN COVER SHALL BE PROVIDED TO ALL DISTRIBUTED AREAS OF THE DEVELOPMENT AND SHALL BE STABILIZED BY SEEDING OR PLANTING. IF EXCESS TOPSOIL REMAINS, THE THICKNESS SHALL BE INCREASED. IF ADDITIONAL IS REQUIRED, THE DEVELOPER SHALL PROVIDE IT. REMOVAL OF EXCESS TOPSOIL SHALL ONLY BE PERMITTED IN ACCORDANCE WITH A PLAN APPROVED BY THE MUNICIPAL AGENCY.

C. SOIL PREPARATION & FINAL GRADING
1. ALL STUMPS AND OTHER TREE PARTS, LITTER, BRUSH, WEEDS, EXCESS OR SCRAP BUILDING MATERIALS, OR OTHER DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF. NO TREE STUMPS, PORTIONS OF TREE TRUNKS OR LIMBS SHALL BE BURIED ANYWHERE IN THE DEVELOPMENT. ALL DEAD OR DYING TREES, STANDING OR FALLEN, SHALL BE REMOVED FROM THE SITE.
2. ROUGH GRADE: SITE TO BE RECEIVED BY LANDSCAPE CONTRACTOR, TO WITHIN 1/10 FOOT PLUS OR MINUS, BY OWNER BASED UPON GRADING PLAN.
3. FINAL GRADE: FINAL GRADE TO CONSIST OF GRADING, RAKING AND HAND WORK NECESSARY TO ACHIEVE DESIRED CONTOUR AND FLOW LINE PATTERNS RESULTING IN EVENLY FINISHED SURFACES FREE OF DEBRIS AND LITTER.
4. SPREAD OVER ALL LAWN, SHRUB AND GROUND COVER AREAS, AMENDMENTS AND FERTILIZER PRESCRIBED IN SOILS REPORT. THOROUGHLY MIX INTO SOIL TO DEPTH OF 6" OR MORE AND FINE GRADE. CONTRACTOR TO IMPORT SOIL NECESSARY TO ATTAIN DESIGN GRADES AND BERMS, ALL IMPORTED SOIL SHALL BE FREE OF WEEDS AND DEBRIS AND HAVE BALANCED PH., SMOOTH AND EVEN GRADING FOR PROPER DRAINAGE. FINAL GRADE SHALL BE 1" BELOW WALK/TOP OF CURB. REMOVE FROM THE SITE ALL STONES OVER 2" IN SIZE.

D. PLANTING
PLANT TREES, SHRUBS AND GROUND COVER AS CALLED FOR WHERE INDICATED ON PLANTING PLAN AND AS DETAILED ON PLANTING DETAIL SHEET.
1. GROUND COVER - FLATS AND/OR CUTTINGS:
ALL PLANT MATERIALS SPECIFIED AS PLUGS OR FLAT STOCK ON PLANTING PLAN SHALL REMAIN IN THE FLATS UNTIL TIME OF TRANSPLANTING. THE FLAT SOIL SHALL CONTAIN SUFFICIENT MOISTURE SO THAT SOIL DOES NOT FALL APART WHEN LIFTING PLANT FROM FLAT. GROUND COVER PLANTS SHALL NOT BE ALLOWED TO DRY OUT BEFORE OR DURING PLANTING. ROOTS SHALL NOT BE EXPOSED TO THE AIR EXCEPT WHILE ACTUALLY BEING PLANTED. WILTED PLANTS WILL NOT BE ACCEPTED. AT THE TIME OF PLANTING, THE SOIL AROUND EACH PLANT SHALL BE FIRMED SUFFICIENTLY TO FORCE OUT AIR POCKETS. PLANTS TO BE PLANTED IN TRIANGULAR SPACING AS SPECIFIED O.C. (ON CENTER). ALL CUTTINGS SHALL BE MINIMUM OF 6" LONG. WATER IMMEDIATELY AFTER EACH PLANTING UNTIL ONE INCH OF WATER PENETRATION IS OBTAINED. CARE SHALL BE EXERCISED AT ALL TIMES TO PROTECT THE PLANTS AFTER PLANTING. ANY DAMAGE TO PLANTS BY TRAMPLING OR OTHER OPERATIONS OF THIS CONTRACT SHALL BE REPAIRED IMMEDIATELY.
2. SHRUBS:
PLANT ALL CONTAINER GROWN PLANTS IN PLANTING PITS AS DIRECTED ON TREE AND SHRUB PLANTING AND STAKING DETAIL. THOROUGHLY MIX BACKFILL ACCORDING TO TREE AND SHRUB PLANTING AND STAKING DETAIL. CONTRACTOR SHALL CONSTRUCT BASINS AROUND ALL TREES; BASINS SHALL NOT EXCEED TOP OF ROOT BALL CROWN.
3. TREES:
ALL TREES SHALL HAVE A CALIPER OF TWO AND ONE-HALF (2 ½) INCHES OR SPECIFIED CALIPER IN PLANTING SCHEDULE AND THEY SHALL BE NURSERY GROWN, OF SUBSTANTIALLY UNIFORM SIZE AND SHAPE, AND HAVE STRAIGHT TRUNKS. TREES SHALL BE PROPERLY PLANTED AND STAKED ACCORDING TO TREE AND SHRUB PLANTING AND STAKING/ EVERGREEN PLANTING & STAKING DETAIL AND PROVISION MADE BY THE APPLICANT FOR REGULAR WATERING AND MAINTENANCE UNTIL THEY ARE ESTABLISHED. THE APPLICANT SHALL REPLACE DEAD OR DYING TREES DURING THE NEXT PLANTING SEASON.
4. TOP DRESSING:
TOP DRESS ALL GROUND COVER AND SHRUB AREAS WITH 2" THICK LAYER OF OGC (ORGANIC GROUND COVER) AS SPECIFIED ON PLANTING PLAN.

E. SOD
1. AREAS SHALL HAVE A SMOOTH CONTINUAL GRADE BETWEEN EXISTING OF FIXED CONTROLS, SUCH AS: WALKS, CURBS, CATCH BASINS. ROLL, SCARIFY, RAKE AND LEVEL AS NECESSARY TO OBTAIN TRUE, EVEN SOIL STRUCTURE.
2. APPLY FERTILIZERS AS SPECIFIED BY SOIL ANALYSIS TO DEPTH OF 6".
3. SOD SHALL BE INSTALLED THE SAME DAY AS IT IS DELIVERED. SOD SHALL NOT BE LEFT ON PALLETS IN THE HOT SUN. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE TO SOD NOT INSTALLED ON DAY OF DELIVERY.
4. UNROLL SOD CAREFULLY AND PLACE IN STAGGERED PATTERN OF STRIPS. SOD SHALL BE INSTALLED AGAINST ADJACENT STRIPS TO ELIMINATE JOINTS AND EDGES.
5. FOLLOWING INSTALLATION, SOD SHALL BE IRRIGATED THOROUGHLY TO PROVIDE MOISTURE PENETRATION TO AT LEAST 6" INTO PREPARED SOIL.
6. ALL SOD SHALL BE HANDLED AND LAID IN A HIGH STANDARD OF WORKMANSHIP MANNER. ALL ENDS, JOINTS, AND CUTS SHALL FIT TIGHTLY SO THAT THERE ARE NO VOIDS. THE FINAL APPEARANCE SHALL BE ONE OF A CONTINUOUS LAWN. SECTIONS OF SOD LESS THAN 18" LONG OR 9" WIDE SHALL NOT BE USED.
7. NO SOD AREA WILL BE ACCEPTED UNTIL APPROVED BY AUTHORITY HAVING JURISDICTION OR THE UNDERSIGNED, AS REQUIRED.

GENERAL SLOPE PLANTING

A. PLANTING PREPARATION
1. SLOPE TEXTURING
a. CUT SLOPES: THESE SURFACES SHALL BE ROUGHENED IN A HORIZONTAL DIRECTION FOLLOWING THE CONTOUR OF THE SLOPE. THE ROUGHENED TEXTURE SHALL BE MADE BY HAND RAKING OR SIMILAR MECHANICAL MEANS.
b. FILL SLOPES: THESE SURFACES SHALL BE COMPACTED AND FINISHED AND ALSO ROUGHENED IN A HORIZONTAL DIRECTION FOLLOWING THE CONTOUR OF THE SLOPE. THE ROUGHENED TEXTURE SHALL BE MADE BY HAND RAKING OR SIMILAR MECHANICAL MEANS.
2. WEED ERADICATION
a. MANUALLY REMOVE EXISTING VEGETATION WHERE NOTED ON PLAN AND DISPOSE OFFSITE.
b. FERTILIZE ALL PLANTING AREAS BASED UPON SOIL ANALYSIS. BEGIN WATERING PROCESS TO ACTIVATE FERTILIZER AND ADDITIVE CHEMICALS.
c. WATER ALL PLANTING AREAS THOROUGHLY FOR A PERIOD OF TWO (2) CONSECUTIVE WEEKS. THE UNDERSIGNED SHALL APPROVE SPECIFIC WATERING DURATION AND FREQUENCY DESIGNED TO GERMINATE ALL RESIDUAL WEED SEEDS.
d. IF PERENNIAL WEEDS APPEAR, DISCONTINUE WATERING PROCESS FOR TWO (2) DAYS, THEN APPLY RECOMMENDED HERBICIDE BY LICENSED APPLICATOR.IF ANNUAL WEEDS APPEAR, USE STRAIGHT CONTACT HERBICIDE AS PER THE LICENSED APPLICATOR'S RECOMMENDATIONS. NO WATER SHALL BE APPLIED FOR A MINIMUM OF FOUR (4) DAYS FOLLOWING APPLICATION CONTACT WEED KILLER.
e. ALLOW SUFFICIENT PERIOD OF TIME TO INSURE THAT ALL WEEDS ARE DEAD.
f. WATER ALL PLANTING AREAS THOROUGHLY FOR A PERIOD OF THREE (3) WEEKS. A SHORTER WATERING PERIOD MAY BE PERMISSIBLE AT THE DISCRETION OF THE UNDERSIGNED AND/OR THE PEST CONTROL ADVISOR. DISCONTINUE WATERING FOR ONE (1) DAY PRIOR TO THE SECOND APPLICATION OF THE HERBICIDE. RE-APPLY A STRAIGHT CONTACT WEED KILLER, AS PER THE PEST CONTROL ADVISOR'S RECOMMENDATIONS. FOR EFFECTIVE WEED ERADICATION, ALLOW A MINIMUM OF FOUR (4) DAYS WITHOUT IRRIGATION.RO
g. REMOVE ALL DESICCATED WEEDS FROM SLOPES.

B. PLANTING
PLANT TREES AND SHRUBS AS INDICATED ON PLANTING PLAN AND AS DETAILED ON PLANTING DETAIL SHEET. SUBSTITUTIONS OF PLANTS WILL NOT BE ACCEPTED UNLESS APPROVED IN WRITING BY THE UNDERSIGNED. INSTALL ALL CONTAINER GROWN PLANTS ACCORDING TO TREE AND SHRUB PLANTING AND STAKING DETAIL. THOROUGHLY MIX THE SPECIFIED MATERIALS FOUND IN THE SOIL ANALYSIS AND THOSE SPECIFIED IN THE PLANTING DETAIL SHEET WITH THE SITE SOIL PRIOR TO BACKFILLING OF PLANTING PITS.

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. TRACKING PADS TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED SESC PLAN. A MINIMUM OF 1 TRACKING PAD MUST BE IN OPERATION AT ALL TIMES. ADDITIONAL TRACKING PADS, CONFORMING TO SESC STANDARDS MAY BE ADDED AS THE CONTRACTOR DEEMS NECESSARY.
2. SOIL STOCKPILES TO BE PLACED AS REQUIRED WITHIN THE PROJECT SITE AND SILT FENCE LIMITS WITH SILT FENCE PLACED AROUND THE PERIMETER IN ACCORDANCE WITH THE SOIL EROSION AND SEDIMENT CONTROL DETAILS.
3. SHOULD ADDITIONAL STOCKPILE AREA BE NEEDED, THE CONTRACTOR SHALL CONFORM TO THE STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL.
4. THIS PLAN PREPARED TO ADDRESS EROSION AND SEDIMENT CONTROL COMPONENT OF THE STORMWATER POLLUTION PREVENTION PLAN (SPPP) AT TIME OF DESIGN. ALL OTHER COMPONENTS OF THE SPPP AND GENERAL STORMWATER PERMIT NO. NJG0088323 TO BE RESPONSIBILITY OF THE DEVELOPER AND/OR SITE CONTRACTOR.
5. THIS PLAN IS FOR SOIL EROSION AND SEDIMENT CONTROL MEASURES ONLY. THIS PLAN IS NOT TO BE USED FOR SITE CONSTRUCTION

File: X:\Jobs\2462 – JS Pro Construction\25-2462-02 – 12010 Long Beach Boulevard_Long Beach Township, NJ\25246202CAD\dwg\C100 Title Sheet.dwg, ---> C101 Notes – Site Plan
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WATER NOTES

1. CONTRACTOR TO PERFORM TEST PITS TO VERIFY EXISTING UTILITY DEPTHS, SIZES AND LOCATIONS PRIOR TO CONNECTING PROPOSED WATER MAINS TO EXISTING WATER MAINS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS SO THAT DESIGN MODIFICATIONS CAN BE MADE IF NECESSARY.
2. SHOP DRAWINGS AND PRODUCT CATALOG INFORMATION FOR ALL WATER, CONDUITS, MATERIALS, AND APPURTENANCES, TO BE PROVIDED TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PURCHASING.
3. PRIOR TO ACCEPTANCE, AS-BUILT PLANS FOR THE WATER SYSTEM SHALL BE SUBMITTED AND APPROVED.
4. REFER TO TECHNICAL SPECIFICATIONS FOR WATER MATERIAL, INSTALLATION SPECIFICATIONS AND TESTING REQUIREMENTS.
5. ALL WATER MAINS, WATER SERVICES AND APPURTENANCES SHALL BE CONSTRUCTED, TESTED AND DISINFECTED IN ACCORDANCE WITH LONG BEACH TOWNSHIP WATER & SEWER DEPARTMENT AND NJDEP REQUIREMENTS.
6. ALL WATER SERVICES TO BE INSTALLED IN CONFORMANCE WITH THE REQUIREMENTS OF THE PLUMBING SUBCODE PROMULGATED BY THE NEW JERSEY DEPARTMENT OF COMMUNITY AFFAIRS PURSUANT TO THE STATE UNIFORM CONSTRUCTION CODE ACT (NJAC 5:23-3.15).
7. ALL NEW WATER MAINS SHALL BE LAID WITH A MINIMUM OF 3.5 FEET OF COVER OVER THE PIPE TO PREVENT FREEZING.
8. IN ACCORDANCE WITH N.J.A.C. 7:10-11.10(E)5, ALL WATER MAINS AND SANITARY SEWER LINES SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 10 FEET. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (STEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN OR WITH SUCH OTHER SEPARATION EXPRESSLY APPROVED BY THE NJDEP. AT CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN (SEWER SERVICE LATERALS ARE NOT SUBJECT TO THIS REQUIREMENT). IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE SEWER LINE SHALL BE OF WATERTIGHT CONSTRUCTION (DUCTILE IRON), WITH WATERTIGHT JOINTS THAT ARE A MINIMUM OF 10 FEET FROM THE WATER MAIN.
9. UNLESS OTHERWISE INDICATED DIP WATER MAIN SHALL BE CLASS 53 CEMENT LINED DUCTILE IRON PIPE. (POLYETHYLENE ENCASEMENT)
10. A MARKER STAKE PROTRUDING A MINIMUM OF FOUR FEET ABOVE THE GROUND SURFACE SHALL BE PLACED TO INDICATE THE END OF THE CONSTRUCTION STUBS FOR BUILDING CONNECTIONS.

PUBLIC UTILITY NOTES

1. ALL PUBLIC UTILITY SERVICE CONNECTIONS TO BUILDINGS TO BE LOCATED UNDERGROUND.
2. ELECTRICAL, TELEPHONE, CATV AND ALL OTHER WIRE-SERVED UTILITY EXTENSIONS AND SERVICES SHALL BE INSTALLED UNDERGROUND WITH STANDARDS ESTABLISHED BY THE SERVICING UTILITY COMPANY.
3. GAS AND ELECTRICAL SERVICE CONDUITS AND STRUCTURES MUST BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS AND PROVIDED DESIGN BY ATLANTIC CITY ELECTRIC AND NEW JERSEY NATURAL GAS. THE CONTRACTOR MUST PROVIDE RECORD "AS BUILT" PLANS OF ALL CONDUITS AND STRUCTURES TO ATLANTIC CITY ELECTRIC AND NEW JERSEY NATURAL GAS PROJECT ENGINEER AND THE PROJECT OWNER.
4. TELEPHONE AND CATV SERVICE CONDUIT AND STRUCTURES MUST BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF VERIZON AND COMCAST. THE CONTRACTOR MUST PROVIDE RECORD "AS BUILT" PLANS OF ALL CONDUITS AND STRUCTURES TO VERIZON, COMCAST, PROJECT ENGINEER AND PROJECT OWNER.
5. CONTRACTOR SHALL MAINTAIN FIELD NOTES, PHOTOGRAPHS, AND REDLINE PLANS CLEARLY RECORDING THE LOCATION OF ALL UNDERGROUND INSTALLATIONS. THESE RECORDS SHALL BE PROVIDED TO THE ENGINEER UPON REQUEST.

GENERAL LANDSCAPING NOTES

A. CLEAN-UP
AFTER ALL INSTALLATION OPERATIONS HAVE BEEN COMPLETED, REMOVE ALL RUBBISH, EXCESS SOIL, EMPTY PLANT CONTAINERS AND TRASH FROM THE SITE DAILY. ALL SCARS, RUTS AND OTHER MARKS IN THE AREA CAUSED BY THIS WORK SHALL BE REPAIRED AND THE GROUND LEFT IN A NEAT, ORDERLY CONDITION. LEAVE SITE IN BROOM-CLEAN CONDITION AT THE END OF EACH DAY.

B. MAINTENANCE
1. DURING INSTALLATION, THE CONTRACTOR SHALL MAINTAIN A SUFFICIENT NUMBER OF LABORERS AND ADEQUATE EQUIPMENT TO PERFORM THE WORK HEREIN SPECIFIED. PLANT MAINTENANCE SHALL CONSIST OF WATERING, WEEDING, CARING OF PLANTS, INCLUDING GROUND COVERS, SHRUBS, VINES AND TREES, EDGING AND MOWING LAWNS, FERTILIZING, CONTROL OF PESTS AND DISEASES, AND MAINTAINING WALKS FREE OF DEBRIS AND DIRT. UPON COMPLETION OF EACH AREA, THE CONTRACTOR, THE UNDERSIGNED, THE OWNER, ALONG WITH THE OWNER'S MAINTENANCE REPRESENTATIVE SHALL CONDUCT AN INSPECTION OF COMPLETED AREA. AT THIS TIME, A LIST OF CORRECTIONS, IF ANY, SHALL BE MADE. ALL CORRECTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. AFTER ALL WORK HAS BEEN COMPLETED, INSPECTED AND ACCEPTED, ALL AREAS WILL BE MAINTAINED FOR A PERIOD OF NINETY (90) CALENDAR DAYS OR AS LONG AS IS NECESSARY TO ESTABLISH THRIVING TREES, SHRUBS, TURF AND GROUND COVER WITHOUT BARE SPOTS.
3. KEEP ALL AREAS WEED-FREE, ADEQUATELY WATERED AND NEATLY CULTIVATED FOR THE NINETY (90) PERIOD. REMOVE ALL DEBRIS FROM SITE AND KEEP THE ENTIRE SITE BROOM-CLEAN. TURF AREAS ARE TO BE MOWED WEEKLY.
4. RE-SEED ALL BARE SPOTS IN TURF AREAS AT TWO (2) WEEK INTERVALS AND MAINTAIN UNTIL AN EVEN STAND OF TURF IS OBTAINED. RE-SEED ALL SLOPE AREAS THAT FAIL TO GERMINATE EVENLY. REPAIR ALL ERODED SURFACES AT NO COST TO THE OWNER.
5. DAMAGE TO ANY PLANTED AREA SHALL BE REPAIRED IMMEDIATELY. DEPRESSIONS CAUSED BY VEHICLES OR FOOT TRAFFIC SHALL BE FILLED WITH TOPSOIL, LEVELED AND REPLANTED.
6. THE PROJECT SHALL BE SO CARED FOR THAT A NEAT, CLEAN CONDITION WILL BE PRESENTED AT ALL TIMES TO THE SATISFACTION OF THE OWNER AND THE UNDERSIGNED. THE LANDSCAPE CONTRACTOR SHALL BE EXPECTED TO MAKE A MINIMUM OF ONE (1) VISIT PER WEEK FOR MAINTENANCE PURPOSES DURING THE MAINTENANCE PERIOD (90 DAYS).
7. AT THE END OF THE MAINTENANCE PERIOD, ALL AREAS THAT HAVE BEEN PLANTED SHALL BE FERTILIZED WITH COMMERCIAL FERTILIZER. ANALYSIS AND RATE OF APPLICATION SHALL BE PER THE SOILS REPORT.
8. THE CONTRACTOR SHALL REQUEST A FINAL SITE VISIT SEVEN (7) DAYS PRIOR TO THE END OF THE MAINTENANCE PERIOD (90 DAYS). THIS REQUEST SHALL BE WRITTEN AND DIRECTED TO THE OWNER AND THE UNDERSIGNED. UPON WRITTEN ACCEPTANCE OF THE PROJECT BY THE OWNER AND THE UNDERSIGNED, THE CONTRACTOR SHALL BE RELIEVED OF ANY FURTHER MAINTENANCE.

C. GUARANTEE
ALL TURF, GROUND COVER AND SHRUBS SHALL BE GUARANTEED TO LIVE AND GROW THROUGH THE FIRST GROWING SEASON. TREES SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR. THE CONTRACTOR, AT NO COST TO THE OWNER, SHALL REPLACE ANY MATERIAL THAT FAILS TO GROW THROUGH THE SPECIFIED MAINTENANCE AND GUARANTEED.

D. INSPECTION DURING CONSTRUCTION
1. OBSERVATION VISITS SPECIFIED HEREIN SHALL BE MADE BY THE UNDERSIGNED OR HIS REPRESENTATIVE. THE CONTRACTOR SHALL REQUEST OBSERVATION AT LEAST TWO (2) WORKING DAYS IN ADVANCE OF THE TIME THAT THE OBSERVATION IS REQUESTED. A
2. OBSERVATION VISITS ARE SUGGESTED FOR THE FOLLOWING PARTS OF THE WORK:
a. UPON COMPLETION OF GRADING AND SOIL CONDITIONING PRIOR TO PLANTING.
b. WHEN TREES ARE SPOTTED FOR PLANTING, BUT PRIOR TO WHEN PLANTING HOLES ARE EXCAVATED.
c. WRITTEN ACCEPTANCE OF THE PROJECT TO RELEASE THE CONTRACTOR FROM FURTHER MAINTENANCE SHALL OCCUR AFTER FINAL OBSERVATION WITH THE OWNER OR HIS REPRESENTATIVE AT THE END OF THE MAINTENANCE PERIOD.

E. VERIFICATION OF DIMENSIONS
ALL SCALED DIMENSIONS ARE APPROXIMATE. PRIOR TO PROCEEDING WITH ANY WORK, THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND QUANTITIES, AND SHALL IMMEDIATELY NOTIFY THE UNDERSIGNED OF ANY DISCREPANCY BETWEEN THE DRAWINGS AND/OR SPECIFICATIONS AND ACTUAL CONDITIONS. NO WORK SHALL BE DONE IN ANY AREA WHERE THERE IS SUCH A DISCREPANCY UNTIL APPROVAL FOR SAME HAS BEEN GIVEN BY THE UNDERSIGNED.

F. UTILITIES
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UNDERGROUND UTILITY LINES PRIOR TO ANY CONSTRUCTION, SO THAT PROPER PRECAUTIONS MAY BE TAKEN NOT TO DAMAGE SUCH LINES AND PLANT LOCATIONS. PROMPTLY NOTIFY THE UNDERSIGNED TO ARRANGE FOR RELOCATIONS OF UTILITIES OR PLANTING LOCATIONS. FAILURE TO FOLLOW THIS PROCEDURE PLACES UPON THE CONTRACTOR THE RESPONSIBILITY FOR, AT HIS OWN EXPENSE, MAKING ANY AND ALL REPAIRS FOR DAMAGES RESULTING FROM HIS WORK.

G. EXISTING TREES
CONTRACTOR IS TO TAKE CARE IN PRESERVING ANY EXISTING TREES GREATER THAN OR EQUAL TO 6" ON THE SITE. DAMAGE OR LOSS OF THESE TREES WILL RESULT IN REPLACEMENT OF EQUAL SIZE BY THE LANDSCAPE CONTRACTOR.

H. INSTALLATION
THIS WORK INCLUDES, BUT IS NOT LIMITED TO THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT, FINAL GRADING, SEEDING, SOIL AMENDMENTS, ETC., AS MAY BE REQUIRED FOR A COMPLETE INSTALLATION.

I. PLANTING SPECIFICATIONS
ALL TREE AND SHRUB MATERIAL SPECIFIED MUST MEET STANDARD INDUSTRY SPECIFICATIONS FOR THE CONTAINER SIZE INDICATED. DOWNSIZING OR SUBSTITUTION OF PLANT MATERIAL WITHOUT PRIOR APPROVAL OF UNDERSIGNED WILL NOT BE ALLOWED.

J. FINAL GRADING AND PLANTING
ALL LANDSCAPE AREAS SHALL BE GRADED TO A SMOOTH EVEN SURFACE PRIOR TO ANY PLANT INSTALLATION. ALL PLANT MATERIALS SHALL BE INSTALLED USING GOOD HORTICULTURAL PRACTICES IN ACCORDANCE WITH THE PLANS AND DETAILS.

K. TREE PLANTINGS
1. WHENEVER FEASIBLE, TREES SHOULD BE PLANTED A MINIMUM OF TEN (10) FEET FROM ALL UNDERGROUND UTILITIES, STREETLIGHTS, HYDRANTS, AND OUT OF DRAINAGE FLOW LINES. SHOULD THIS NOT BE POSSIBLE, CONTACT THE UNDERSIGNED FOR DECISION ON PLACEMENT.
2. ALL TREES IN TURF AREAS SHALL HAVE 12" MIN. CLR. CIRCUMFERENCE AROUND THE TRUNK BASE. PROVIDE 3" MIN. THK. MULCH AT BASE OF TRUNK.

L. GROUNDCOVER
GROUNDCOVER TYPE SHOWN SHALL BE PLANTED IN ALL SHRUB AREAS AS SPECIFIED ON PLANS. GROUNDCOVER SHALL BE PLANTED AT 18" ON-CENTER UNIFORM TRIANGULAR SPACING, AND SHALL BE CONTINUOUS UNDER ALL TREE AND SHRUB MASSES AS SHOWN ON PLAN.

M. TURF
ALL TURF AREAS ARE TO BE SODDED WITH AN APPROVED GRASS MIXTURE.

*SEE LANDSCAPING NOTES AND DETAIL SHEET FOR ADDITIONAL PLANTING NOTES.

SITE LAYOUT NOTES

1. ALL SIGNAGE TO BE POSTED IN ACCORDANCE WITH THE UNITED STATES DEPARTMENT OF TRANSPORTATION-FEDERAL HIGHWAY ADMINISTRATION, "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS (MUTCD), LATEST EDITION.
2. ALL STOP BARS SHALL BE 24" WIDE WHITE THERMO PLASTIC STRIPE. ALL OTHER STRIPING MAY BE EPOXY.
3. ALL CURB AND SIDEWALKS SHALL CONFORM TO STATE AND FEDERAL BARRIER FREE DESIGN STANDARDS. WHERE GRANITE BLOCK CURB IS USED, A TRANSITION FROM GRANITE BLOCK TO CONCRETE SHALL BE PROVIDED AT ALL ACCESSIBLE SIDEWALK RAMPS OR CURB CUTS
4. ALL SIDEWALK RAMPS MARKED HCR TO HAVE DETECTABLE WARNING SURFACE INSTALLED IN ACCORDANCE WITH ADA REGULATIONS. ALL DETECTABLE WARNING STRIPS SHALL BE "REPLACEABLE WET-SET" OR EQUIVALENT. SURFACE MOUNT OR "STICK ON" WARNING STRIPS ARE NOT PERMITTED UNLESS NOTED OTHERWISE.
5. WHERE GRANITE BLOCK CURB IS USED, A TRANSITION FROM GRANITE BLOCK TO CONCRETE SHALL BE PROVIDED AT ALL ACCESSIBLE SIDEWALK RAMPS OR CURB CUTS.
6. ALL PROPOSED ON-SITE CURBING TO BE (VERTICAL CONCRETE CURBING, BELGIUM BLOCK, MOUNTABLE CONCRETE). ALL PROPOSED CURBING WITHIN MUNICIPAL OR COUNTY RIGHT-OF-WAYS TO BE VERTICAL CONCRETE CURBING.
7. ALL CONNECTIONS WITH EXISTING PAVEMENTS, CURBS, SIDEWALKS, ETC SHALL BE SAW CUT.
8. RETAINING WALLS REQUIRE STRUCTURAL DESIGN BY A LICENSED PROFESSIONAL ENGINEER PRIOR TO CONSTRUCTION.
9. SIDEWALK/WALKWAY RISERS MUST BE GREATER THAN 4" AND LESS THAN 7".
10. SEE LANDSCAPE PLANS FOR DETAILS ON HARDSCAPE AND PLANTING MATERIALS.
11. SEE ARCHITECT'S PLANS FOR BUILDING ELEVATIONS AND FLOOR PLANS.

GRADING NOTES

1. ALL PROPOSED ON-SITE CURBING TO BE VERTICAL CURB WITH 6" REVEAL, UNLESS OTHERWISE STATED.
2. ALL CURBS SHALL BE DEPRESSED AT CROSSWALKS AND CONFORM TO APPLICABLE STATE AND FEDERAL BARRIER FREE DESIGN STANDARDS. WHERE GRANITE BLOCK CURB IS USED, A TRANSITION FROM GRANITE BLOCK TO CONCRETE SHALL BE PROVIDED AT ALL ACCESSIBLE SIDEWALK RAMPS OR CURB CUTS.
3. ALL CURB INLETS TO USE 6" CASTING. TOP OF CASTING TO FOLLOW TOP OF CURB ELEVATIONS.
4. FOR ALL AREAS LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY, ACCESSIBILITY SHALL BE IN ACCORDANCE WITH THE CURRENT PUBLIC RIGHTS-OF-WAY ACCESS ADVISORY COMMITTEE GUIDELINE (PROWAG).
a. ALL WALKING SURFACES TO HAVE A MAXIMUM RUNNING SLOPE OF 1:20 (5%).
b. ALL WALKING SURFACES GREATER THAN 1:20 (5%) WILL REQUIRE HANDRAILS.
c. RAMP RUNS SHALL HAVE A MAXIMUM SLOPE OF 1:12 (8.3%).
d. ALL WALKING SURFACES TO HAVE A MAXIMUM CROSS SLOPE OF 1:48 (2%).
e. ALL CROSSWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 1:48 (2%).
5. ALL GRADING WITHIN GRASSED AREAS TO BE A MINIMUM OF 2% AND A MAXIMUM OF 3:1 SLOPE UNLESS OTHERWISE NOTED.
6. POSITIVE DRAINAGE TO BE MAINTAINED FROM ALL BUILDINGS IN ACCORDANCE WITH APPLICABLE REGULATIONS AND BUILDING CODE.
7. FLOOR ELEVATIONS, ADJACENT GRADE, DOORWAY LOCATIONS AND ELEVATIONS SHALL BE CONFIRMED WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION BY THE CONTRACTOR.
8. ALL EXCAVATED SOIL TO BE DISPOSED SHALL BE PROPERLY CLASSIFIED, HANDLED, AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
9. ALL GRASSED AREAS TO HAVE A MINIMUM OF 4" CLEAN TOP SOIL, WHEN SOD IS BEING INSTALLED, OR 6" CLEAN TOP SOIL FOR SEEDING APPLICATIONS.

DRAINAGE NOTES

1. PIPE LENGTHS INDICATED ARE MEASURED CENTER TO CENTER OF EACH STRUCTURE.
2. SHOP DRAWINGS AND PRODUCT CATALOG INFORMATION FOR ALL STORM DRAINAGE SEWER STRUCTURES, CONDUITS, MATERIALS, AND APPURTENANCES, TO BE PROVIDED TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PURCHASING.
3. BUILDING ROOF LEADERS AND CLEAR WASTE FROM BUILDING TO CONNECT TO SITE STORM SEWER SYSTEM. CONNECTION POINTS WILL BE COORDINATED WITH ARCHITECTURAL AND PLUMBING PLANS.
4. UNLESS OTHERWISE INDICATED:
a. RCP SHALL BE CLASS 3 WALL, BELL AND SPIGOT TYPE WITH O-RING GASKETS, UNLESS OTHERWISE NOTED.
b. HDPE PIPES SHALL BE ADS N-12 WITH WATER TIGHT JOINTS OR APPROVED EQUAL.
c. STORM SEWER PVC PIPES SHALL BE SCHEDULE 80 WITHIN PAVED AREAS AND SCHEDULE 40 IN LANDSCAPED AREAS, UNLESS OTHERWISE NOTED.
5. ALL STORM PIPES TO BE CLEANED AND TELEVISED PRIOR TO ISSUANCE OF CERTIFICATES OF OCCUPANCY.

SANITARY SEWER NOTES

1. CONTRACTOR TO PERFORM TEST PITS TO VERIFY EXISTING UTILITY DEPTHS, SIZES AND LOCATIONS PRIOR TO CONNECTING PROPOSED SEWER TO EXISTING SEWER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS SO THAT DESIGN MODIFICATIONS CAN BE MADE IF NECESSARY.
2. PIPE LENGTHS INDICATED ARE MEASURED CENTER TO CENTER OF EACH STRUCTURE.
3. ALL SANITARY SEWER MAINS, SEWER LATERALS, AND APPURTENANCES SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH LONG BEACH TOWNSHIP WATER & SEWER UTILITY DEPARTMENT AND NJDEP REQUIREMENTS.
4. SHOP DRAWINGS AND PRODUCT CATALOG INFORMATION FOR ALL SANITARY SEWER, CONDUITS, MATERIALS, AND APPURTENANCES, TO BE PROVIDED TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PURCHASING.
5. ANY DAMAGE CAUSED TO THE EXISTING SANITARY SEWER SYSTEM AS A RESULT OF CONSTRUCTION ACTIVITIES (TO BE DETERMINED BY THE SEWER OWNER) SHALL BE REPAIRED BY THE CONTRACTOR, AT THE COST OF THE CONTRACTOR AND TO THE SEWER OWNER'S SATISFACTION.
6. PRIOR TO ACCEPTANCE, AS-BUILT PLANS FOR THE SANITARY SEWER SYSTEM SHALL BE SUBMITTED AND APPROVED.
7. PRIOR TO ACCEPTANCE, THE SANITARY SEWER SYSTEM SHALL BE TESTED IN ACCORDANCE WITH LONG BEACH TOWNSHIP WATER & SEWER UTILITY DEPARTMENT RULES AND REGULATIONS, AND WITNESSED AND APPROVED BY THE AUTHORITY ENGINEER.
8. REFER TO TECHNICAL SPECIFICATIONS FOR SANITARY SEWER FOR MATERIAL, INSTALLATION SPECIFICATIONS AND TESTING REQUIREMENTS.
9. IN ACCORDANCE WITH N.J.A.C. 7:10-11.10(E)5, ALL WATER MAINS AND SANITARY SEWER LINES SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 10 FEET. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (STEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN OR WITH SUCH OTHER SEPARATION EXPRESSLY APPROVED BY THE NJDEP. AT CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN (SEWER SERVICE LATERALS ARE NOT SUBJECT TO THIS REQUIREMENT). IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE SEWER LINE SHALL BE OF WATERTIGHT CONSTRUCTION (DUCTILE IRON), WITH WATERTIGHT JOINTS THAT ARE A MINIMUM OF 10 FEET FROM THE WATER MAIN.
10. UNLESS OTHERWISE INDICATED SANITARY SEWER MAINS SHALL BE PVC SDR-35
11. A MARKER STAKE PROTRUDING A MINIMUM OF FOUR FEET ABOVE THE GROUND SURFACE SHALL BE PLACED TO INDICATE THE END OF THE CONSTRUCTION STUBS FOR BUILDING CONNECTIONS, OR STUBS SHALL BE TURNED AND EXTENDED ABOVE GRADE BY FOUR FEET AND CAPPED.
12. GREASE TRAPS MUST BE CONSTRUCTED IN CONFORMANCE WITH THE REQUIREMENTS OF THE NATIONAL STANDARD PLUMBING CODE AND THE LONG BEACH TOWNSHIP BUILDING DEPT.
13. CIRCULAR HOLE SAWS WHICH ARE APPROPRIATELY SIZED OR HAND DRILLS MUST BE USED TO MAKE OPENINGS IN EXISTING SEWERS TO RECEIVE LATERALS. JACKHAMMERS, SLEDGEHAMMERS AND OTHER UNSUITABLE TOOLS OR MACHINERY WHICH MAY DAMAGE THE SEWER MAIN ARE NOT ALLOWED TO BE USED TO MAKE LATERAL OPENINGS. ALL DEBRIS MUST BE REMOVED AND NOT ALLOWED TO FALL INTO THE PIPE.

GENERAL NOTES

1. SUBJECT PROPERTY
TAX MAP #12: BLOCK #10.02, LOT#15, LONG BEACH TOWNSHIP, OCEAN COUNTY, NEW JERSEY
CENTER SITE COORDINATES 276209.27 N 571002.49 E.
2. PURPOSE OF THIS PLAN SET
THIS PLAN SET HAS BEEN PREPARED FOR THE PURPOSE OF PRELIMINARY/FINAL MAJOR SITE PLAN MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THE PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL FINAL APPROVALS HAVE BEEN OBTAINED AND ALL THE CONDITIONS OF THE APPROVALS HAVE BEEN SATISFIED.
CONTRACTOR/OWNER IS RESPONSIBLE TO ENSURE COPIES OF ALL AGENCY PERMITS AND APPROVALS AREA AVAILABLE AT THE PROJECT SITE AT ALL TIMES. ANY CHANGES MADE TO THE APPROVED DESIGN DOCUMENTS AFTER REGULATORY PERMITS AND APPROVALS ARE ISSUED SHALL BE SUBMITTED TO THE APPROPRIATE AGENCY BY THE CONTRACTOR FOR REVIEW AND APPROVAL.
3. SURVEY DATA
SURVEY INFORMATION CONTAINED HEREON IS BASED ON A FIELD SURVEY PERFORMED BY GRAVATT CONSULTING GROUP, HORIZONTAL DATUM: ASSUMED VERTICAL DATUM: NAVD 88
4. BASE FLOOD ELEVATION
ACCORDING TO FEMA'S EFFECTIVE FIRM ENTITLED "FIRM - FLOOD INSURANCE RATE MAP (FIRM), MONMOUTH COUNTY, NEW JERSEY (ALL JURISDICTIONS)," COMMUNITY PANEL #34029C0603F, DATED 9/29/06, THE SITE IS LOCATED IN ZONE AE, WITH A BASE FLOOD ELEVATION OF 9.0'. ACCORDING TO FEMA'S CURRENT PRELIMINARY FIRM ENTITLED,"PRELIMINARY FLOOD INSURANCE RATE MAP (FIRM)", COMMUNITY PANEL #34029C0603G, DATED 01/30/15, THE SITE IS LOCATED IN ZONE AE, WITH A BASE FLOOD ELEVATION OF 8.0'. BOTH FEMA MAPS REFERENCE THE NAVD88 VERTICAL DATUM.
5. ARCHITECTURAL INFORMATION
ARCHITECTURAL INFORMATION CONTAINED HEREON IS BASED ON PLANS PREPARED BY HAND.LINE ARCHITECTURE, ENTITLED "JSPRO MIXED USE".
6. **BUILDING SETBACK DIMENSIONS**
BUILDING SETBACK DIMENSIONS SHOWN HEREON ARE MEASURED FROM CONCRETE BUILDING FOUNDATION WALLS TO PROPERTY LINES OR OTHER SITE FEATURES. THE CONTRACTOR, ARCHITECT, OR OWNER SHALL VERIFY IF ANY PROPOSED VENEERS WILL BE APPLIED TO BUILDING WALLS THAT MAY DECREASE THE SETBACK DIMENSIONS BECAUSE THIS MAY CAUSE THE BUILDING TO BECOME NON-COMPLIANT WITH ZONING APPROVAL. THE CONTRACTOR, ARCHITECT, OR OWNER SHALL CONTACT THE UNDERSIGNED WITH ANY CHANGES OR QUESTIONS REGARDING SETBACKS DIMENSIONS.
7. UNDERGROUND UTILITIES NOTIFICATION
FOR ANY EXCAVATION IN NEW JERSEY, THE CONTRACTOR MUST CALL NEW JERSEY ONE CALL SERVICE AT 1-800-272-1000 FOR A MARKOUT REQUEST NO LESS THAN THREE (3) WORKING DAYS PRIOR TO STARTING ANY EXCAVATION.
8. VERIFICATION OF UTILITIES
THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE APPROXIMATE LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES (INCLUDING BUT NOT LIMITED TO SANITARY SEWERS, STORM SEWERS, POTABLE WATER LINES AND APPURTENANCES, NATURAL GAS LINES, ELECTRIC, TELEPHONE AND CATV LINES AND UNDERGROUND STORAGE TANKS) THAT MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF THE WORK ARE SHOWN ON THE PLANS. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER, AND THE CONTRACTOR IS ADVISED TO VERIFY IN THE FIELD ALL THE FACTS CONCERNING THE LOCATION AND ELEVATION OF THESE UTILITIES OR OTHER CONSTRUCTION OBSTACLES IMPACTED BY NEW CONSTRUCTION PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN WRITING, PRIOR TO CONSTRUCTION, OF ANY DISCREPANCIES WHICH MAY AFFECT THE PROJECT DESIGN.
9. SPECIFICATIONS
UNLESS OTHERWISE NOTED HEREON, ALL SITE WORK SHALL BE CARRIED OUT IN CONFORMANCE WITH THE PROVISIONS OF THE "NEW JERSEY DEPARTMENT OF TRANSPORTATION (NJDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.
10. CONSTRUCTION REQUIREMENTS
a. ALL CONSTRUCTION AND DEMOLITION SHALL CONFORM WITH ANY APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. CONTRACTOR HAS SOLE RESPONSIBILITY FOR SITE SAFETY WAYS, MEANS AND METHODS OF CONSTRUCTION, AND SHALL CONFORM TO AND ABIDE BY ALL CURRENT OSHA STANDARDS OR REGULATIONS. SAFE CONSTRUCTION PRACTICES REMAIN THE OBLIGATION OF THE CONTRACTOR. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE FEDERAL, STATE AND LOCAL PERMITS PRIOR TO CONSTRUCTION.
b. THE CONTRACTOR SHALL PERFORM ALL WORK IN A FINISHED AND WORKMANLIKE MANNER TO THE ENTIRE SATISFACTION OF THE OWNER AND IN ACCORDANCE WITH THE BEST RECOGNIZED TRADE PRACTICES.
c. THE CONTRACTOR SHALL PROVIDE NECESSARY BARRICADES, SUFFICIENT LIGHTS, SIGNS, AND OTHER TRAFFIC CONTROL METHODS AS MAY BE NECESSARY WITHIN THE PROJECT FOR THE PROTECTION AND THE SAFETY OF THE PUBLIC AND MAINTAIN THROUGHOUT CONSTRUCTION.
d. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE CLEANUP WITHIN THE CONSTRUCTION AREA AND SHALL DISPOSE OF DEBRIS IN ACCORDANCE WITH ANY LOCAL, STATE OR FEDERAL REGULATIONS.
e. ANY DAMAGE TO PUBLIC STREETS, CURBS, SIDEWALKS AND UTILITIES AS A RESULT OF SITE CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR.
11. CONSTRUCTION PERMITS/INSPECTIONS
CONTRACTOR RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS INCLUDING ROAD OPENING PERMITS, PREPARATION OF TRAFFIC CONTROL PLANS, INSTALLATION AND MAINTENANCE OF TRAFFIC CONTROL AND COORDINATION OF ALL INSPECTIONS REQUIRED BY THE (MUNICIPALITY), COUNTY OF ____, (WATER COMPANY)(SEWER COMPANY), AND ANY OTHER APPLICABLE AGENCY HAVING JURISDICTION OVER THE PROJECT.
12. ADA COMPLIANCE
a. ALL SITE IMPROVEMENTS LOCATED ON THE PRIVATE PROPERTY SHALL BE IN COMPLIANCE WITH THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN, STANDARDS FOR PUBLIC ACCOMMODATIONS AND COMMERCIAL FACILITIES: TITLE III.
b. ALL SITE IMPROVEMENTS LOCATED WITHIN PUBLIC RIGHT-OF-WAY SHALL BE IN COMPLIANCE WITH THE CURRENT PUBLIC RIGHTS-OF-WAY ACCESS ADVISORY COMMITTEE GUIDELINES.
13. STORMWATER POLLUTION PREVENTION PLAN
a. SOIL EROSION PLANS HAVE BEEN PREPARED TO ADDRESS EROSION AND SEDIMENT CONTROL COMPONENT OF THE STORMWATER POLLUTION PREVENTION PLAN (SPPP) AT TIME OF DESIGN. ALL OTHER COMPONENTS OF THE SPPP AND GENERAL STORMWATER PERMIT NO. NJ6008823 TO BE RESPONSIBILITY OF THE DEVELOPER AND/OR SITE CONTRACTOR.
b. CONTRACTOR/DEVELOPER MUST PREPARE AND FOLLOW A STORMWATER POLLUTION PREVENTION PLAN FOR THE DURATION OF THE PROJECT.
14. OVERALL CONSTRUCTION DOCUMENTS
THIS PLAN SET CONSISTS OF MULTIPLE SHEETS. INDIVIDUAL PAGES SHALL NOT BE UTILIZED FOR CONSTRUCTION ON THEIR OWN AS NOTES AND INFORMATION PROVIDED ON OTHER SHEETS MAY IMPACT WORK REQUIREMENTS. CONTRACTOR SHALL REVIEW AND UTILIZE ENTIRE PLAN SET FOR CONSTRUCTION.

SITE PREPARATION NOTES

1. PRIOR TO STARTING ANY DEMOLITION CONTRACTOR IS RESPONSIBLE FOR/TO:
a. ENSURE COPIES OF ALL PERMITS AND APPROVALS ARE ON SITE FOR REVIEW.
b. THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO SITE DISTURBANCE.
c. ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE, SHALL BE VERTICALLY AND HORIZONTALLY LOCATED. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL UNDERGROUND UTILITIES.
d. PROTECT AND MAINTAIN IN OPERATION, ALL ACTIVE SYSTEMS THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.
e. FAMILIARIZE THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENT AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AS IDENTIFIED OR REQUIRED FOR PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
f. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES.
g. THE FIRM OR ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISIONS. CONTRACTOR IS TO PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS, TO INSURE PUBLIC AND CONTRACTOR SAFETY.
h. THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE.
2. IN ABSENCE OF SPECIFIC SPECIFICATION, THE CONTRACTOR SHALL PERFORM EARTH MOVEMENT ACTIVITIES, DEMOLITION AND REMOVAL OF ALL FOUNDATION WALLS, FOOTINGS, AND OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE IN ACCORDANCE WITH DIRECTION BY OWNER'S GEOTECHNICAL ENGINEER.
3. DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROPERTY LINES, WITHOUT WRITTEN PERMISSION OF THE OWNER, AND/OR APPROPRIATE GOVERNMENT AGENCY.
4. USE DUST CONTROL MEASURES TO LIMIT THE AMOUNT OF AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR TO WITHIN FEDERAL, STATE, AND/OR LOCAL STANDARDS. AFTER THE DEMOLITION IS COMPLETE, ADJACENT STRUCTURES AND IMPROVEMENTS SHALL BE CLEANED OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.
5. CONTRACTOR IS RESPONSIBLE TO SAFEGUARD SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE UNAUTHORIZED ENTRY OF PERSONS AT ANY TIME.
6. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THAT ALL METHODS AND MEANS ARE TO BE IN ACCORDANCE WITH STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.
7. ALL UTILITY CONNECTIONS TO ADJACENT BUILDINGS MUST STAY ACTIVE DURING CONSTRUCTION.
8. THE CONTRACTOR IS RESPONSIBLE TO ENSURE SHUT OFF, DISCONNECT, AND/OR CAPPING OF ALL UTILITIES TO THE SITE INCLUDING, BUT NOT LIMITED TO, WATER, SEWER, ELECTRIC, CABLE, TELEPHONE, ETC. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL UTILITY SHUT OFFS AND LETTERS, OBTAINING ALL PERMITS TO COMPLETE ALL PHASES OF THE PROJECT.
9. ALL STREET APPURTENANCES (INCLUDING SIGNS, POLES, TREES & FENCING) WITHIN THE LIMITS SHOWN ARE TO BE REMOVED AND DISPOSED OFF-SITE UNLESS OTHERWISE NOTED.
10. EXISTING LIGHTING AND UTILITY POLE REMOVALS ARE TO BE PERFORMED BY THE APPROPRIATE UTILITY COMPANY.
11. ALL UNDERGROUND UTILITIES, LINES, PIPING, STRUCTURES, FOUNDATIONS, VAULTS AND BUILDING FRAGMENTS ASSOCIATED WITH FORMER BUILDINGS, WITHIN THE PROJECT BOUNDARY, ARE TO BE REMOVED AND DISPOSED OFF SITE.
12. ALL STRUCTURES (CURBS, SIDEWALKS, PATIO, RETAINING WALL, FENCES, ASPHALT, CONCRETE, ETC.) WITHIN THE PROJECT'S BOUNDARY SHALL BE REMOVED AND DISPOSED OFF-SITE AT AN APPROPRIATE FACILITY.
13. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OFFSITE IN ACCORDANCE WITH ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES, ORDINANCES, AND LAWS.

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MIXED-USE BUILDING

PROJECT LOCATION:
BLOCK 8.17, LOT 15
12010 LONG BEACH BOULEVARD.
LONG BEACH TOWNSHIP,
OCEAN COUNTY, NJ

OWNER:
LSH HOLDINGS LLC
28 RODEO DRIVE
WEST CREEK, NJ 08092

APPLICANT:
LSH HOLDINGS LLC
28 RODEO DRIVE
WEST CREEK, NJ 08092

APPLICANT'S PROFESSIONALS

ARCHITECT:
HAND LINE ARCHITECT
128 BARTLETT AVENUE,
WEST CREEK, NJ 08092

SURVEYOR:
GRAVATT CONSULTING GROUP
414 LACEY ROAD
FORKED RIVER, NJ 08731

ATTORNEY:
RABAN & RABAN
11710 LONG BEACH BLVD.
LONG BEACH TOWNSHIP, NJ 08008

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PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
0	06/12/25	INITIAL RELEASE

SCALE: N/A	DESIGNED BY: JMW
DATE: 06/12/25	DRAWN BY: M-S
JOB #: 25-2462-02	CHECKED BY: DDC

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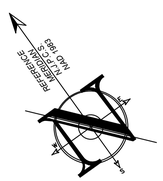
APPROVED BY:
☐ FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:
PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:
PLAN NOTES

SHEET NO:
C101



10 0 10 20

SCALE : 1" = 10'

LEGEND

EXISTING		PROPOSED
	BOUNDARY LINE	
10	CONTOUR LINE	10
+ 46.80	SPOT ELEVATION	+46.80
	BUILDING	
	WALL	
G G	GAS	GAS
W W	WATER	WTR
	INLET	
	STORM	
	SANITARY MAIN	
SAN	SANITARY LATERAL	SAN
OH	OVERHEAD WIRE	O/H
E E	ELECTRIC	E
T T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
x x	FENCE	x x
	LIGHT FIXTURE	
TP-1	TEST PIT LOCATION	TP-1
	GRADE FLOW ARROW	
	SWALE CENTER LINE	

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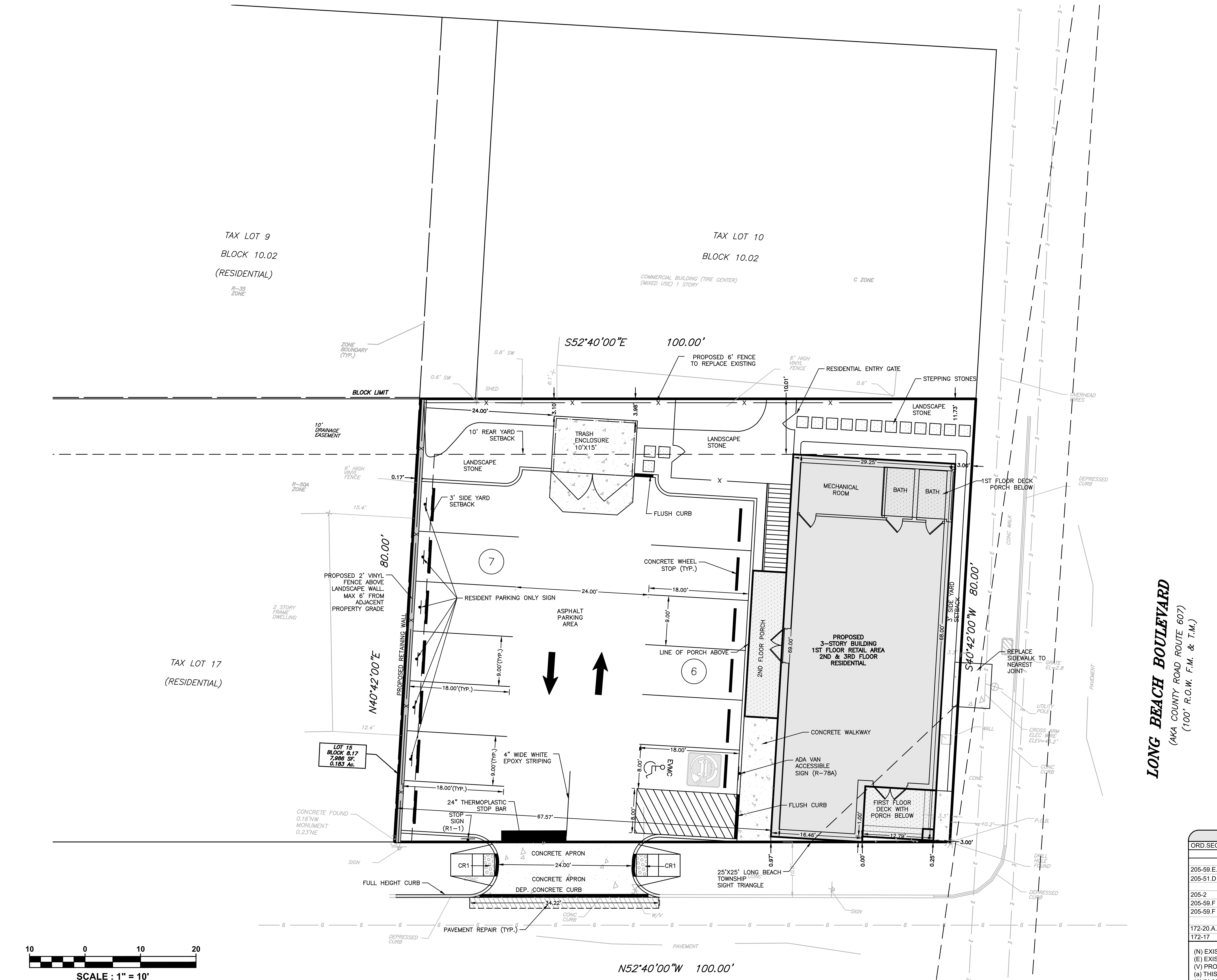
SHEET TITLE:

EXISTING CONDITIONS

SHEET NO:

C200



LEGEND

EXISTING / PROPOSED

- BOUNDARY LINE
- CONTOUR LINE
- SPOT ELEVATION (+46.80)
- BUILDING
- WALL
- GAS
- WATER
- INLET
- STORM
- SANITARY MAIN
- SANITARY LATERAL
- OVERHEAD WIRE
- ELECTRIC
- TELEPHONE
- UTILITY POLE
- HYDRANT
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ZONING COMPLIANCE CHART

ZONE C (§ 205-59)

MIXED USE (RETAIL / RESIDENTIAL): PERMITTED

ORD.SECTION	STANDARD	REQUIRED	EXISTING	PROPOSED	COMPLIES
205-59.C.1	MIN. LOT AREA (SF)	6,000	7,986 (0.183 AC)	NO CHANGE	YES
205-59.C.1	MIN. LOT WIDTH (FT)	60	100	NO CHANGE	YES
	PRINCIPAL BUILDING				
205-59.C	MIN. FRONT YARD SETBACK (FT) (MACEVOY LANE) (1)	N/S	4.00	0.00	YES
205-59.C.4	MIN. REAR YARD SETBACK (FT)	10	43.7	10.01	YES
205-59.C.2	MIN. SIDE YARD SETBACK (FT)	3	3.3	3.00	YES
205-12B	MIN. COMBINED SIDE YARD SETBACK (FT)	30	47.7	70.57	YES
205-10.A	MAX. BUILDING HEIGHT (FT)	34	18.0	33.64	YES
	TRASH ENCLOSURE				
205-25.A.1	MIN. REAR YARD SETBACK (FT)	0	N/A	3.10	YES
205-25.A.1	MIN. SIDE YARD SETBACK (FT)	3	N/A	24.00	YES
205-25.A.1	MIN. FRONT YARD SETBACK (FT)	5	N/A	>5	YES
	PERVIOUS SURFACE SETBACK				
205-33.B.4	MIN. PERVIOUS SETBACK FROM REAR PROPERTY LINE (FT)(3)	1.5	1.2 (N)	3.10 (X)	YES
205-33.B.4	MIN. PERVIOUS SETBACK FROM SIDE PROPERTY LINE (FT)	1.5	0.4 (N)	3.00 (X)	YES
	VISION CLEARANCE ON CORNER LOTS				
205-6	OBSTRUCTION LOCATED IN SITE TRIANGLE	NOT PERMITTED	BUILDING LOCATED IN SITE TRIANGLE (N)	BUILDING LOCATED IN SITE TRIANGLE (V)	NO
	LOT COVERAGE				
205-33.B.3.a	MAX. IMPERVIOUS COVERAGE (%)	75	98.82 (N)	86.43 (I)	NO

(N) EXISTING NON-CONFORMITY (I) IMPROVED CONDITION N/A - NOT APPLICABLE
(E) EXISTING VARIANCE (X) VARIANCE / NON-CONFORMITY ELIMINATED N/S - NOT SPECIFIED
(V) PROPOSED VARIANCE (W) PROPOSED WAIVER
(a) THIS PERTAINS TO AN EXISTING STRUCTURE WHICH WAS NOT MADE AVAILABLE TO THIS OFFICE
(1) WHERE A LOT IS SITUATED BETWEEN TWO LOTS EACH OF WHICH IS DEVELOPED WITH A MAIN BUILDING, THE MINIMUM FRONT-YARD SETBACK REQUIREMENT OF SUCH LOT MAY BE THE AVERAGE OF THE FRONT YARDS OF THE EXISTING BUILDINGS BUT NOT LESS THAN 10 FEET.
(2) PER SECTION 205-11.E.1.a ON ANY CORNER LOT, THE OWNER OF SUCH LOT MAY DETERMINE UPON WHICH STREET HE OR SHE WISHES THE MAIN BUILDING TO FRONT. THE STREET NOT SELECTED AS THE FRONT YARD SHALL BE DESIGNATED AS THE SIDE YARD. ALL FRONT-YARD AND SIDE-YARD REGULATIONS SHALL APPLY TO THE LOT, AS SELECTED.
(3) THE EIGHTEEN-INCH PERVIOUS AREA IS NOT REQUIRED FOR DRIVEWAYS WITH A MINIMUM SIX-INCH-HIGH CURBLINE ALONG THE SIDE OF A DRIVEWAY ABUTTING A PROPERTY LOT LINE.

PARKING, DRIVEWAY & LOADING COMPLIANCE CHART (§ 30-59)

ORD.SECTION	STANDARD	REQUIRED	PROPOSED	COMPLIES
	PARKING SPACES			
	NUMBER OF PARKING SPACES			
205-59.E.1	RETAIL USE: 2 SPACES PER 1,000 SF OF FLOOR AREA (1)	(2,005.23/1,000)X2=4	7 (>50% OF TOTAL PARKING)	YES
205-51.D	RESIDENTIAL USE: 3 SPACES PER UNIT	3X2=6	6	
	TOTAL REQUIRED SPACES	10	13	
205-2	MIN. STALL SIZE - FULL SIZE VEHICLES	9x18	9'x18'	YES
205-59.F	REQUIRED NUMBER OF ACCESSIBLE SPACES- UP TO 25 SPACE PARKING LOT	1	1	YES
205-59.F	LOADING SPACE (2)	N/A	0	YES
	CORNER LOT DEPRESSED CURB REQUIREMENTS			
172-20.A.2	MAX. DEPRESSED CURB WIDTH (FT)- IN CASE OF ONE DEPRESSED CURB	27	34.22 (W)	NO
172-17	CURB & SIDEWALK WIDTH IN CASE OF STREETS 50 FT	10	10.00	YES

(N) EXISTING NON-CONFORMITY (I) IMPROVED CONDITION N/A - NOT APPLICABLE
(E) EXISTING VARIANCE (X) VARIANCE / NON-CONFORMITY ELIMINATED N/S - NOT SPECIFIED
(V) PROPOSED VARIANCE (W) PROPOSED WAIVER
(a) THIS PERTAINS TO AN EXISTING STRUCTURE WHICH WAS NOT MADE AVAILABLE TO THIS OFFICE
(1) IN ACCORDANCE WITH 205-59(18)c, A MINIMUM OF 50% OF THE PARKING AT THE PROPERTY SHALL BE FOR THE NONRESIDENTIAL USES LOCATED AT THE PROPERTY
(2) THAT THIS SUBSECTION SHALL NOT APPLY TO BUSINESS OFFICES AND PROFESSIONAL OFFICES; PROVIDED, HOWEVER, NO LOADING ZONES SHALL BE REQUIRED FOR ANY BUSINESS OR COMMERCIAL USE OF LESS THAN 4,000 SQUARE FEET INCLUDING STORAGE

ELECTRIC VEHICLE PARKING SUMMARY (P.L. 1975, c. 291)

PARKING LOT OR GARAGE NOT COVERED IN C.40:55D-66.20.3.b.(1)

SECTION	STANDARD	REQUIRED	PROPOSED	COMPLIES
3.c.	MINIMUM NUMBER OF MAKE-READY (MR) PARKING SPACES			
3.b.(1)(a)	25 OR FEWER OFF-STREET PARKING SPACES	1	1	YES
3.b.(1)(e)	MINIMUM NUMBER OF ADA PARKING SPACES	5% OF MAKE-READY PARKING SPACES	1	YES

(MR) "MAKE-READY" MEANS THE PRE-WIRING OF ELECTRICAL INFRASTRUCTURE AT A PARKING SPACE, OR SET OF PARKING SPACES, TO FACILITATE EASY AND COST-EFFICIENT FUTURE INSTALLATION OF ELECTRIC VEHICLE SUPPLY EQUIPMENT OR ELECTRIC VEHICLE SERVICE EQUIPMENT, INCLUDING, BUT NOT LIMITED TO, LEVEL TWO EVSE AND DIRECT CURRENT FAST CHARGERS. MAKE READY INCLUDES EXPENSES RELATED TO SERVICE PANELS, JUNCTION BOXES, CONDUIT, WIRING, AND OTHER COMPONENTS NECESSARY TO MAKE A PARTICULAR LOCATION ABLE TO ACCOMMODATE ELECTRIC VEHICLE SUPPLY EQUIPMENT OR ELECTRIC VEHICLE SERVICE EQUIPMENT ON A "PLUG AND PLAY" BASIS. "MAKE-READY" IS SYNONYMOUS WITH THE TERM "CHARGER READY," AS USED IN P.L.2019, c.362 (C.48:25-1 et al.).
* RETAIL WITH FEWER THAN 25 SPACES EXEMPT, 0 EV SPACES REQUIRED.

SIGNAGE COMPLIANCE CHART (§ 205-65)

ORD.SECTION	STANDARD	REQUIRED	PROPOSED	COMPLIES
205-65(B)7	MAX. AREA (SF)	10% GROUND FLOOR AREA	162	YES
205-65(B)7	MAX. HEIGHT (FT)	5	3	YES
205-65(B)7	MAX. NUMBER OF SIGNS PER FRONTAGE	1	1	YES

(N) EXISTING NON-CONFORMITY (I) IMPROVED CONDITION N/A - NOT APPLICABLE
(E) EXISTING VARIANCE (X) VARIANCE / NON-CONFORMITY ELIMINATED N/S - NOT SPECIFIED
(V) PROPOSED VARIANCE (W) PROPOSED WAIVER
(a) THIS PERTAINS TO AN EXISTING STRUCTURE WHICH WAS NOT MADE AVAILABLE TO THIS OFFICE

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MIXED-USE BUILDING

PROJECT LOCATION:
BLOCK 8.17, LOT 15
12010 LONG BEACH BOULEVARD.
LONG BEACH TOWNSHIP,
OCEAN COUNTY, NJ

OWNER:
LSH HOLDINGS LLC
28 RODEO DRIVE
WEST CREEK, NJ 08092

APPLICANT:
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WEST CREEK, NJ 08092

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HAND LINE ARCHITECT
128 BARTLETT AVENUE,
WEST CREEK, NJ 08092

SURVEYOR:
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JOB #: 25-2462-02	CHECKED BY: DDC

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PLAN INFORMATION

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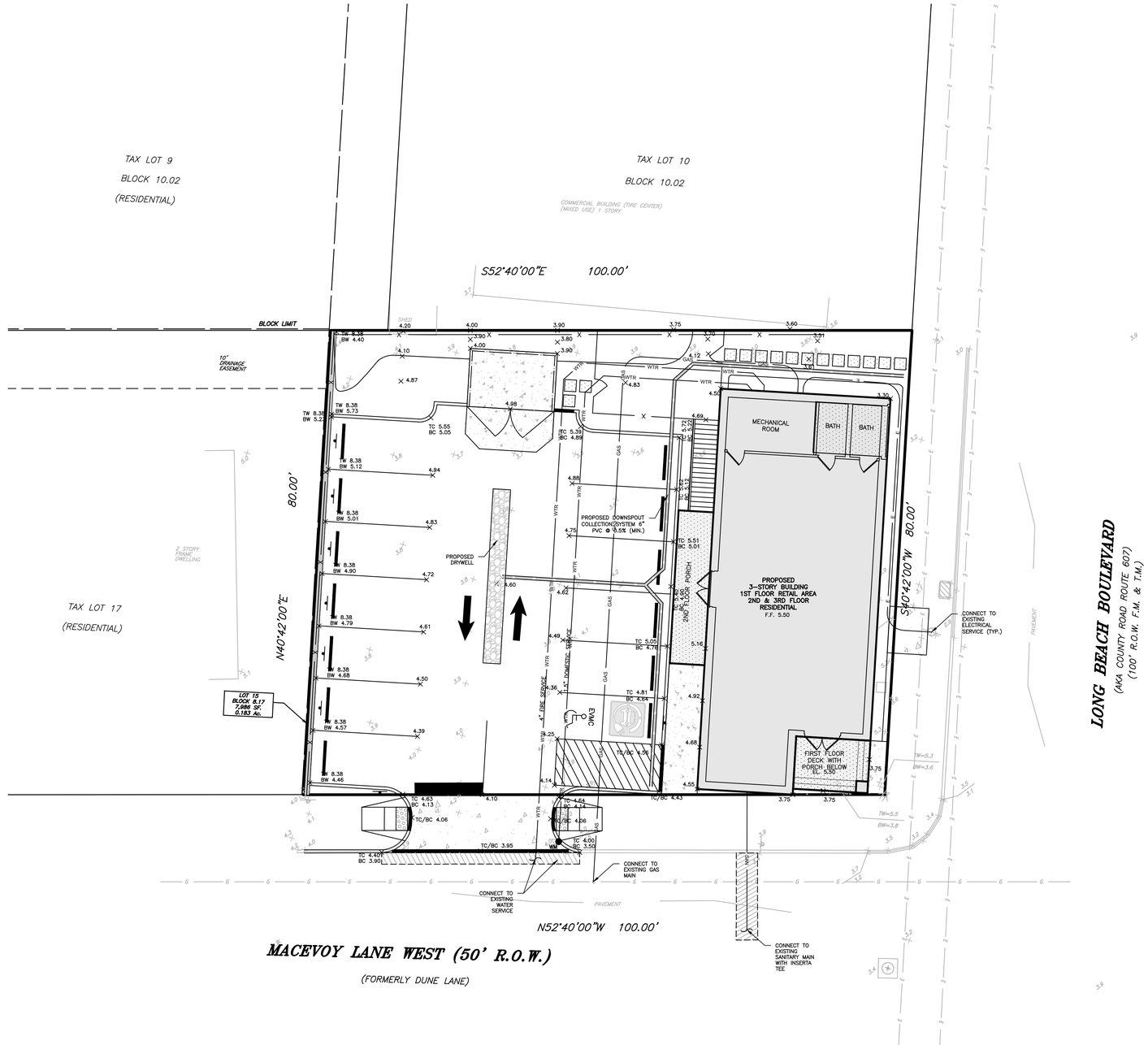
PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:
PROPOSED CONDITIONS

SHEET NO:
C300



10 0 10 20

SCALE : 1" = 10'

LEGEND

EXISTING		PROPOSED
	BOUNDARY LINE	
70	CONTOUR LINE	70
+ 46.80	SPOT ELEVATION	+ 46.80
	BUILDING	
	WALL	
G G	GAS	GAS
W W	WATER	WTR
	INLET	
	STORM	
	SANITARY MAIN	
SAN	SANITARY LATERAL	SAN
OH	OVERHEAD WIRE	O/H
E E	ELECTRIC	E
T T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
x x	FENCE	x x
	LIGHT FIXTURE	
TP-1	TEST PIT LOCATION	TP-1
	GRADE FLOW ARROW	
	SWALE CENTER LINE	

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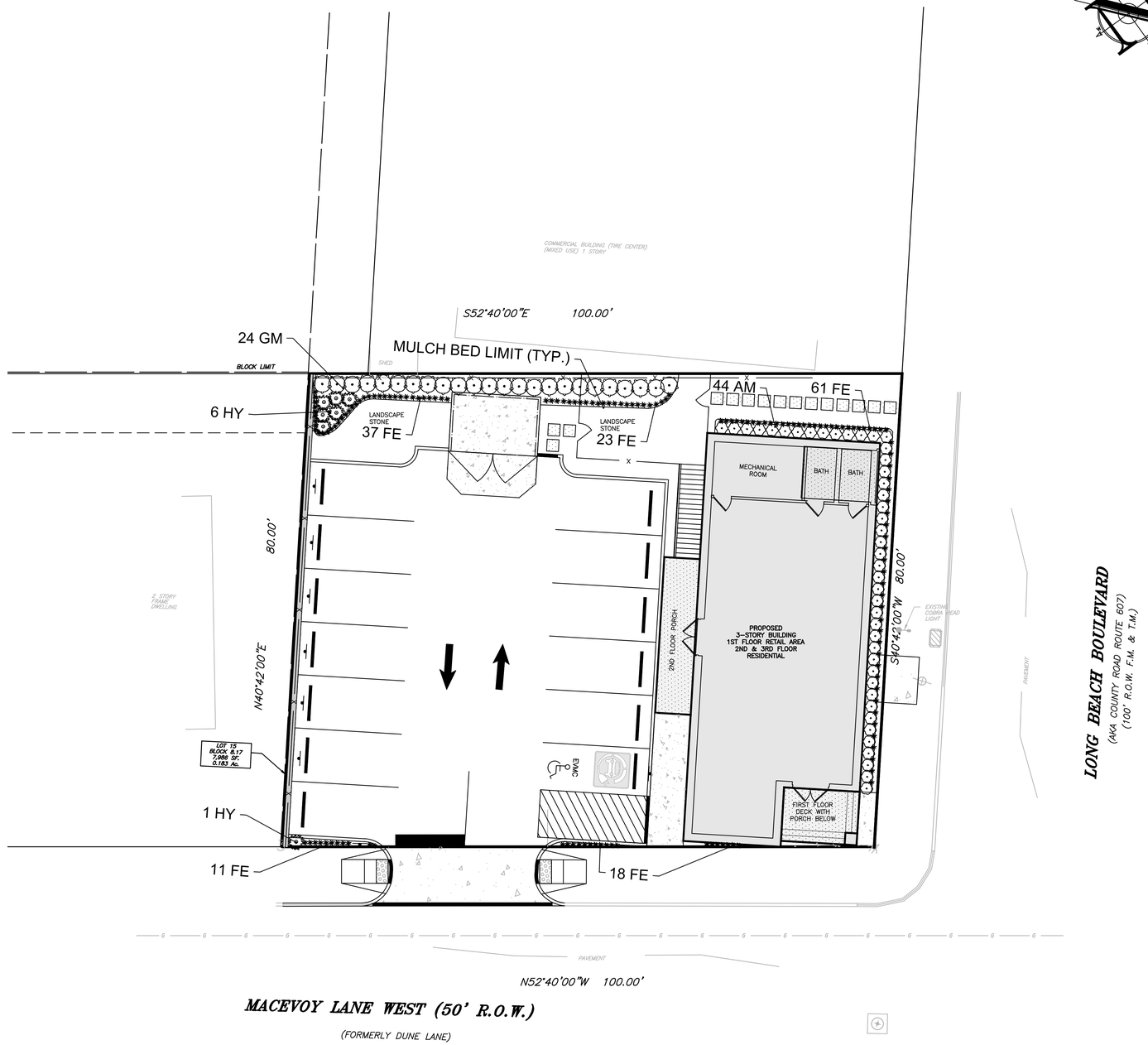
SHEET TITLE:

GRADING, DRAINAGE, AND UTILITY PLAN

SHEET NO:

C400

PLANTING SCHEDULE						
KEY	QTY.	BOTANICAL NAME	COMMON NAME	PLANTING SIZE	MATURE SIZE	ROOT
		SHRUBS (3)				
GM	24	GREEN MOUNTAIN	GREEN MOUNTAIN BOXWOOD	8'-10' HT.		(Cont.)
HY	7	HYDRANGEA 'ENDLESS SUMMER'	ENDLESS SUMMER HYDRANGEA	1.5'-2' HT. 3 GAL		(Cont.)
AM	44	ACHILLEA X MOONSHINE	MOONSHINE YARROW	1 GAL		(Cont.)
		GROUNDCOVER (1)				
FE	150	FESTUCA GLAUCA 'ELIJAH BLUE'	BLUE FESCUE	1 GAL.	1 FT	B&B



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+ 46.80	SPOT ELEVATION	+ 46.80
	BUILDING	
	WALL	
G G	GAS	GAS
W W	WATER	WTR
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x x	FENCE	x x
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TP-7	TEST PIT LOCATION	TP-1
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SEE SHEET C101 FOR PLAN NOTES

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PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

LANDSCAPE PLAN

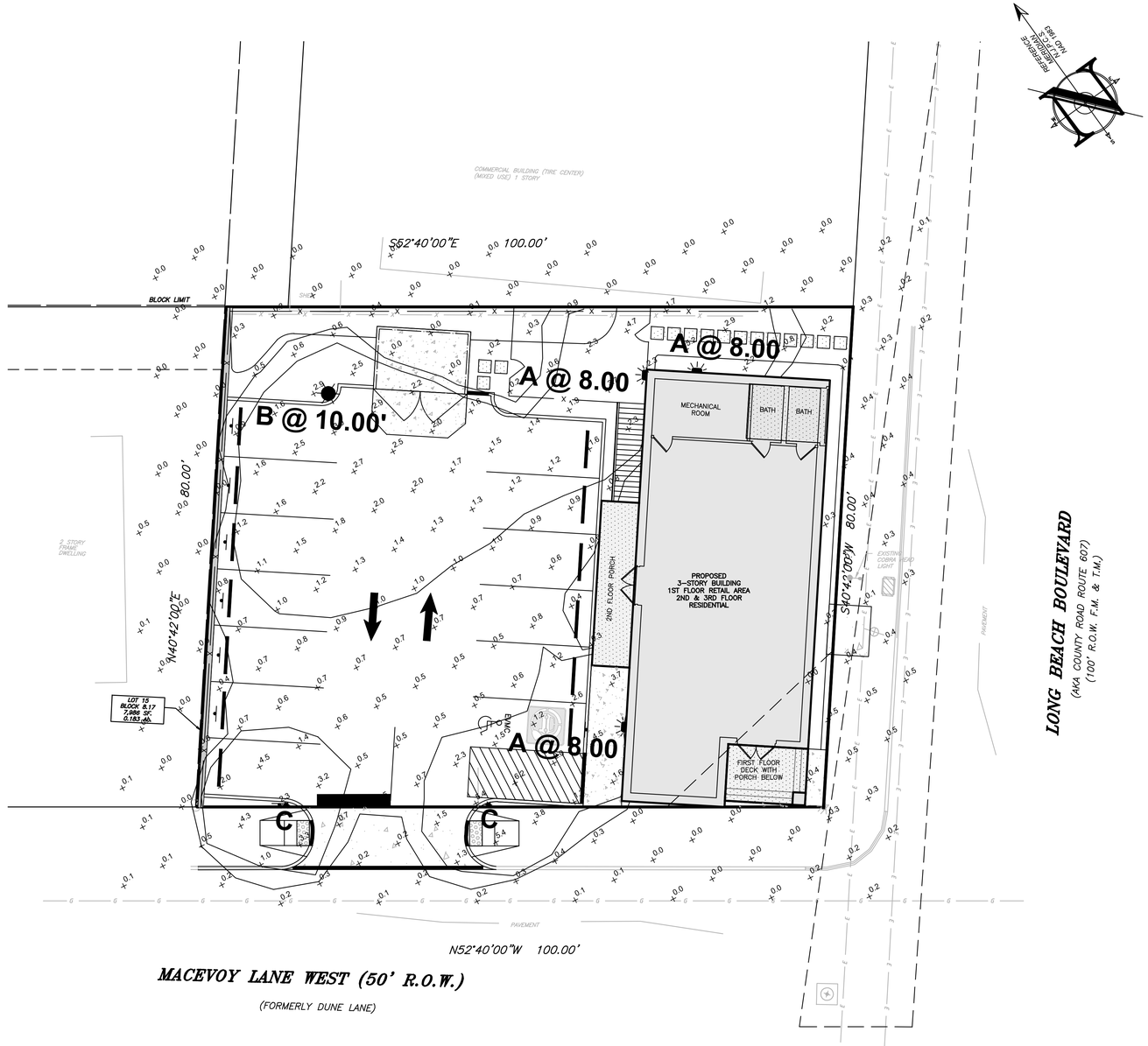
SHEET NO:

C600

SCHEDULE OF LIGHTING REQUIREMENTS (§ 30-56.4)				
ORD. SECTION	STANDARD	PERMITTED	PROPOSED	COMPLIES
164-9.A.6	MIN. LIGHT INTENSITY (LUMEN)	0.5	0.5	YES
164-9.A.6	MAX. LIGHTING LEVEL AT PROPERTY LINES (fc)	1.0	0.1	YES
164-9.A.6	MAX. LIGHTING LEVEL THROUGH OUT THE SITE (fc)	1.5	6.2	YES

LUMINAIRE SCHEDULE									
LABEL	QTY.	MANUFACTURER	CATALOG NUMBER	LIGHT TYPE	LUMENS	COLOR (K)	DIRECTION OF ILLUMINATION	MOUNTING TYPE	MOUNTING HEIGHT
A	3	LITHONIA LIGHTING	WPX1 LED P1 30K MVOLT	LED	1,537	3,000	DOWN	WALL	SEE PLAN
B	1	LITHONIA LIGHTING	DSX1 LED P1 30K 70CRI TFTM	LED	7,446	3,000	FORWARD	POLE	10'
C	2	LITHONIA LIGHTING	DSXB LED 16C 350 30K SYM	LED	1,558	3,000	FORWARD	BOLLARD	SEE DETAIL

NOTES:
1. LIGHTING CONTOUR VALUES SHOWN ARE: 1.0, 0.50 AND 0.25 FOOTCANDLES.
2. ALL LIGHTS TO REMAIN ON FROM DUSK UNTIL DAWN.



10 0 10 20

SCALE : 1" = 10'

LEGEND

EXISTING		PROPOSED
	BOUNDARY LINE	
60	CONTOUR LINE	60
+ 46.80	SPOT ELEVATION	+ 46.80
	BUILDING	
	WALL	
G G	GAS	GAS
W W	WATER	WTR
	INLET	
	STORM	
	SANITARY MAIN	
SAN	SANITARY LATERAL	SAN
OH	OVERHEAD WIRE	O/H
E E	ELECTRIC	E
T T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
X X	FENCE	X X
	LIGHT FIXTURE	
TP-1	TEST PIT LOCATION	TP-1
	GRADE FLOW ARROW	
	SWALE CENTER LINE	

SEE SHEET C101 FOR PLAN NOTES

File: X:\Jobs\25462 -- JS Pro Construction\25-2462-02 -- 12010 Long Beach Boulevard,Long Beach Township, NJ\25462020CAD\dwg\C600 Landscape.dwg, --> C601 Lighting Plan
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PROJECT INFORMATION

PROJECT NAME:

PROPOSED MIXED-USE BUILDING

PROJECT LOCATION:

BLOCK 8.17, LOT 15
12010 LONG BEACH BOULEVARD.
LONG BEACH TOWNSHIP,
OCEAN COUNTY, NJ

OWNER:

LSH HOLDINGS LLC
28 RODEO DRIVE
WEST CREEK, NJ 08092

APPLICANT:

LSH HOLDINGS LLC
28 RODEO DRIVE
WEST CREEK, NJ 08092

APPLICANT'S PROFESSIONALS

ARCHITECT:
HAND LINE ARCHITECT
128 BARTLETT AVENUE.
WEST CREEK, NJ 08092

SURVEYOR:
GRAVATT CONSULTING GROUP
414 LACEY ROAD
FORKED RIVER, NJ 08731

ATTORNEY:
RABAN & RABAN
11710 LONG BEACH BLVD.
LONG BEACH TOWNSHIP, NJ 08008

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SINCE 2003

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165 CHESTNUT STREET, SUITE 200, ALLENDALE, NJ 07401
20 N. MAIN STREET, SUITE 2B, MANAHAWKIN, NJ 08050
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Douglas D. Clelland

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev. #	Date	Comment
0	06/12/25	INITIAL RELEASE

SCALE: 1"=10'	DESIGNED BY: JMW
DATE: 06/12/25	DRAWN BY: M-S
JOB #: 25-2462-02	CHECKED BY: DDC

☒ NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

LIGHTING PLAN

SHEET NO:

C601

D-Series
LED Bollard

Catalog Number	
Notes	
Type	

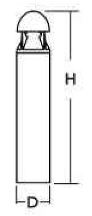
Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The D-Series LED Bollard is a stylish, energy-saving, long-life solution designed to perform the way a bollard should—with zero uplight. An optical leap forward, this full cut-off luminaire will meet the most stringent of lighting codes. The D-Series LED Bollard's rugged construction, durable finish and long-lasting LEDs will provide years of maintenance-free service.

Specifications

Diameter: 8" Round (20.3 cm)
Height: 42" (106.7 cm)
Weight (max): 27 lbs (12.25 kg)



Ordering Information

EXAMPLE: DSXB LED 16C 700 40K SYM MVOLT DDBXD

DSXB LED

Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Control options	Other options	Finish (required)
DSXB LED	Asymmetric 12C 12 LEDs[1] Symmetric 16C 16 LEDs[2]	350 350 mA 450 450 mA[3,4] 530 530 mA 700 700 mA	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted AMBLW Amber limited wavelength[3,4]	ASY Asymmetric[1] SYM Symmetric[2]	MVOLT[5] 120[5] 208[5] 240[5] 277[5] 347[4]	Shipped installed PE Photoelectric cell, button type DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) ELCW Emergency battery backup[6]	Shipped installed SF Single fuse (120, 277, 347V)[6,7] DF Double fuse (208, 240V)[6,7] H24 24" overall height H30 30" overall height H36 36" overall height FG Ground-fault festoon outlet L/AB Without anchor bolts L/AB4 4-bolt retrofit base without anchor bolts[7]	DWHXD White DNAXD Natural aluminum DDBXD Dark bronze DBLXD Black DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

Accessories
Ordered and shipped separately

MRAB U Anchor bolts for DSXB[8]

NOTES
1. Only available in the 12C, ASY version.
2. Only available in the 16C, SYM version.
3. Only available with 450 AMBLW version.
4. Not available with ELCW.
5. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options), or photocontrol (PE option).
6. Not available with 347V. Not available with fusing. Not available with 450 AMBLW.
7. Single fuse (SF) requires 120, 277, or 347 voltage option. Double fuse (DF) requires 208 or 240 voltage option.
8. MRAB U not available with L/AB4 option.

LITHONIA LIGHTING

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BOLLARD LIGHT: TYPE C
NTS

WPX LED
Wall Packs

5 YEAR warranty

Catalog Number	
Notes	
Type	

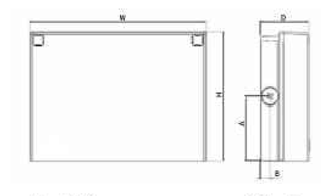
Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The WPX LED wall packs are energy-efficient, cost-effective, and aesthetically appealing solutions for both HID wall pack replacement and new construction opportunities. Available in three sizes, the WPX family delivers 1,550 to 9,200 lumens with a wide, uniform distribution.

The WPX full cut-off solutions fully cover the footprint of the HID glass wall packs that they replace, providing a neat installation and an upgraded appearance. Reliable IP66 construction and excellent LED lumen maintenance ensure a long service life. Photocell and emergency egress battery options make WPX ideal for every wall mounted lighting application.

Specifications


Front View   Side View

Luminaire	Height (H)	Width (W)	Depth (D)	Side Conduit Location A	Side Conduit Location B	Weight
WPX1	8.1" (20.6 cm)	11.1" (28.3 cm)	3.2" (8.1 cm)	4.0" (10.3 cm)	0.6" (1.6 cm)	6.1 lbs (2.8kg)
WPX2	9.1" (23.1 cm)	12.3" (31.1 cm)	4.1" (10.5 cm)	4.5" (11.5 cm)	0.7" (1.7 cm)	8.2 lbs (3.7kg)
WPX3	9.5" (24.1 cm)	13.0" (33.0 cm)	5.5" (13.7 cm)	4.7" (12.0 cm)	0.7" (1.7 cm)	11.0 lbs (5.0kg)

Ordering Information

EXAMPLE: WPX2 LED 40K MVOLT DDBXD

Series	Color Temperature	Voltage	Options	Finish
WPX1 LED P1 1,550 Lumens, 11W[1] WPX1 LED P2 2,900 Lumens, 24W WPX2 LED 6,000 Lumens, 47W WPX3 LED 9,200 Lumens, 69W	30K 3000K 40K 4000K 50K 5000K	MVOLT 120V - 277V 347 347V[3]	(blank) None E4WH Emergency battery backup, CEC compliant (4W, 0 C min)[2] E14WC Emergency battery backup, CEC compliant (14W, -20 C min)[2] PE Photocell[3]	DDBXD Dark bronze DWHXD White DBLXD Black Note: For other options, consult factory.

Note: The lumen output and input power shown in the ordering tree are average representations of all configuration options. Specific values are available on request.

NOTES
1. All WPX wall packs come with 6kV surge protection standard, except WPX1 LED P1 package which comes with 2.5kV surge protection standard. Add SPD6KV option to get WPX1 LED P1 with 6kV surge protection.
Sample nomenclature: WPX1 LED P1 40K MVOLT SPD6KV DDBXD
2. Battery pack options only available on WPX1 and WPX2.
3. Battery pack options not available with 347V and PE options.

FEATURES & SPECIFICATIONS

INTENDED USE
The WPX LED wall packs are designed to provide a cost-effective, energy-efficient solution for the one-for-one replacement of existing HID wall packs. The WPX1, WPX2 and WPX3 are ideal for replacing up to 150W, 250W, and 400W HID luminaires respectively. WPX luminaires deliver a uniform, wide distribution. WPX is rated for -40 C to 40 C.

CONSTRUCTION
WPX feature a die-cast aluminum main body with optimal thermal management that both enhances LED efficacy and extends component life. The luminaires are IP66 rated, and sealed against moisture or environmental contaminants.

ELECTRICAL
Light engine(s) configurations consist of high-efficacy LEDs and LED lumen maintenance of L90/100,000 hours. Color temperature (CCT) options of 3000K, 4000K and 5000K with minimum CRI of 70. Electronic drivers ensure system power factor >90% and THD <20%. All luminaires have 6kV surge protection (Note: WPX1 LED P1 package comes with a standard surge protection rating of 2.5kV. It can be ordered with an optional 6kV surge protection).
All photocell (PE) operate on MVOLT (120V - 277V) input.

Note: The standard WPX LED wall pack luminaires come with field-adjustable drive current feature. This feature allows tuning the output current of the LED drivers to adjust the lumen output (to dim the luminaire).

INSTALLATION
WPX can be mounted directly over a standard electrical junction box. Three 1/2 inch conduit ports on three sides allow for surface conduit wiring. A port on the back surface allows poke-through conduit wiring on surfaces that don't have an electrical junction box. Wiring can be made in the integral wiring compartment in all cases. WPX is only recommended for installations with LEDs facing downwards.

LISTINGS
CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. IP66 Rated. DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

WARRANTY
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25°C. Specifications subject to change without notice.

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WPX LED
Rev. 03/08/22

WALL MOUNTED LIGHT: TYPE A
NTS

D-Series Size 1
LED Area Luminaire

Catalog Number	
Notes	
Type	

Hit the Tab key or mouse over the page to see all interactive elements.

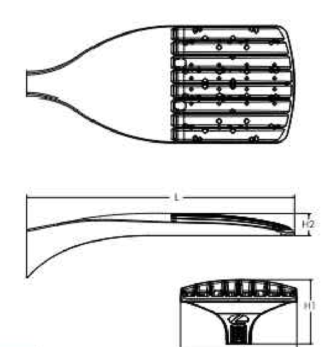
Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Specifications

EPA: 0.69 ft² (0.06 m²)
Length: 32.71" (83.1 cm)
Width: 14.26" (36.2 cm)
Height H1: 7.88" (20.0 cm)
Height H2: 2.73" (6.9 cm)
Weight: 34 lbs (15.4 kg)



ds design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

Design Select options indicated by this color background.

Ordering Information

EXAMPLE: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED

Series	LEDs	Color temperature[2]	Color Rendering Index[2]	Distribution	Voltage	Mounting
DSX1 LED	Forward optics P1 P6 P2 P7 P3 P8 P4 P9 P5 Rotated optics P10[1] P12[1] P11[1] P13[1]	(this section 70CRI only) 30K 3000K 40K 4000K 50K 5000K 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	 70CRI 70CRI 70CRI 80CRI 80CRI 80CRI 80CRI 80CRI	AFR Automotive front row T1S Type I short T2M Type II medium T3M Type III medium T3LG Type III low glare[3] T4M Type IV medium T4LG Type IV low glare[3] TFTM Forward throw medium T5M Type V medium T5LG Type V low glare T5W Type V wide BLC3 Type III backlight control[3] BLC4 Type IV backlight control[3] LCCO Left corner cutoff[3] RCCO Right corner cutoff[3]	MVOLT (120V-277V)[4] HVOLT (347V-480V)[5,6] XVOLT (277V - 480V)[7,8] 120[16,26] 208[16,26] 240[16,26] 277[16,26] 347[16,26] 480[16,26]	Shipped included SPA Square pole mounting (#8 drilling) RPA Round pole mounting (#8 drilling) SPA5 Square pole mounting #5 drilling[9] RPA5 Round pole mounting #5 drilling[9] SPA8N Square narrow pole mounting #8 drilling WBA Wall bracket[10] MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)

Control options	Other options	Finish (required)
Shipped installed NLTAIR2 PIRHN nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc.[11,12,20,21] PIR High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc[13,20,21] PER NEMA twist-lock receptacle only (controls ordered separate)[14] PER5 Five-pin receptacle only (controls ordered separate)[14,21] PER7 Seven-pin receptacle only (controls ordered separate)[14,21] FAO Field adjustable output[15,21] BL30 Bi-level switched dimming, 30%[16,21] BL50 Bi-level switched dimming, 50%[16,21] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[17] DS Dual switching[18,19,21]	Shipped installed SPD20KV 20KV surge protection HS Houseside shield (black finish standard)[22] L90 Left rotated optics[1] R90 Right rotated optics[1] CCE Coastal Construction[23] HA 50°C ambient operation[24] BAA Buy America(n) Act and/or Build America Buy America Qualified SF Single fuse (120, 277, 347V)[25] DF Double fuse (208, 240, 480V)[25] Shipped separately EGSR External Glare Shield (reversible, field install required, matches housing finish) BSDB Bird Spikes (field install required)	DDBXD Dark Bronze DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

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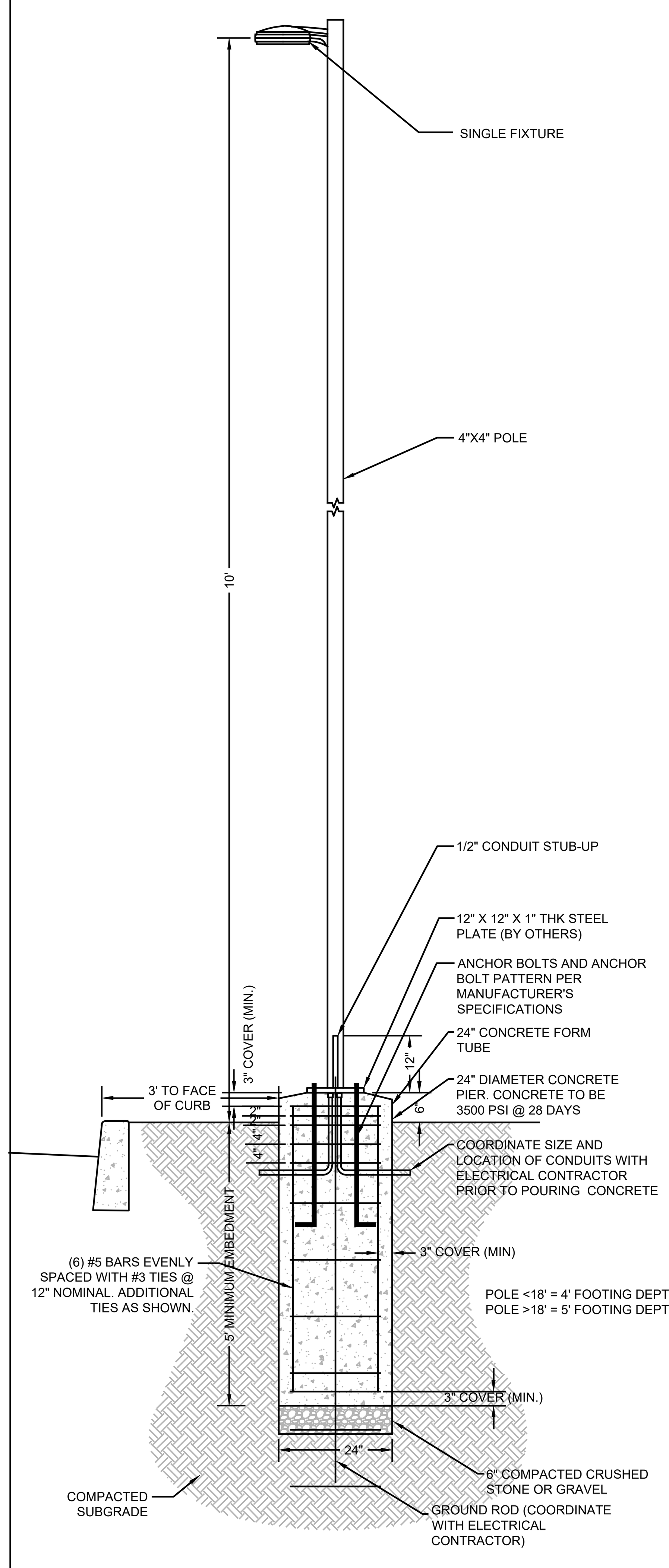
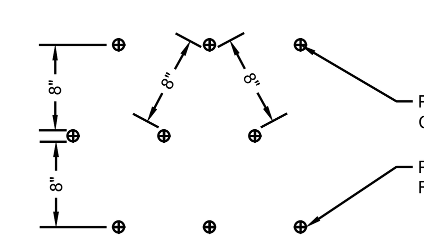
DSX1-LED
Rev. 04/29/25
Page 1 of 10

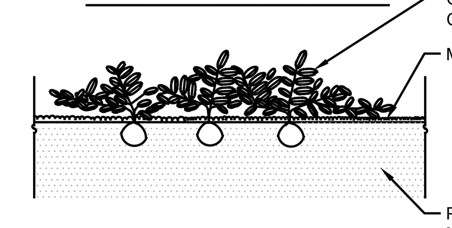
POLE MOUNTED LIGHT: TYPE B
NTS



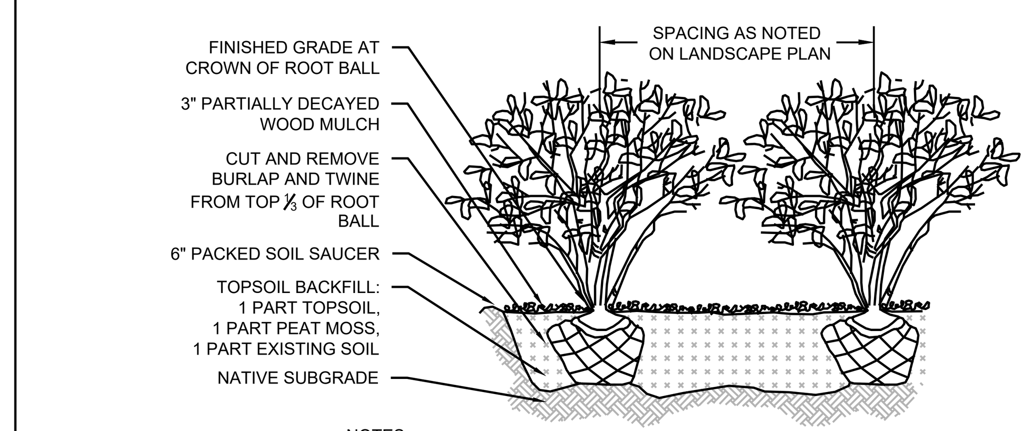
LIGHT POLE DETAIL
NTS



TYPICAL SPACING PLAN

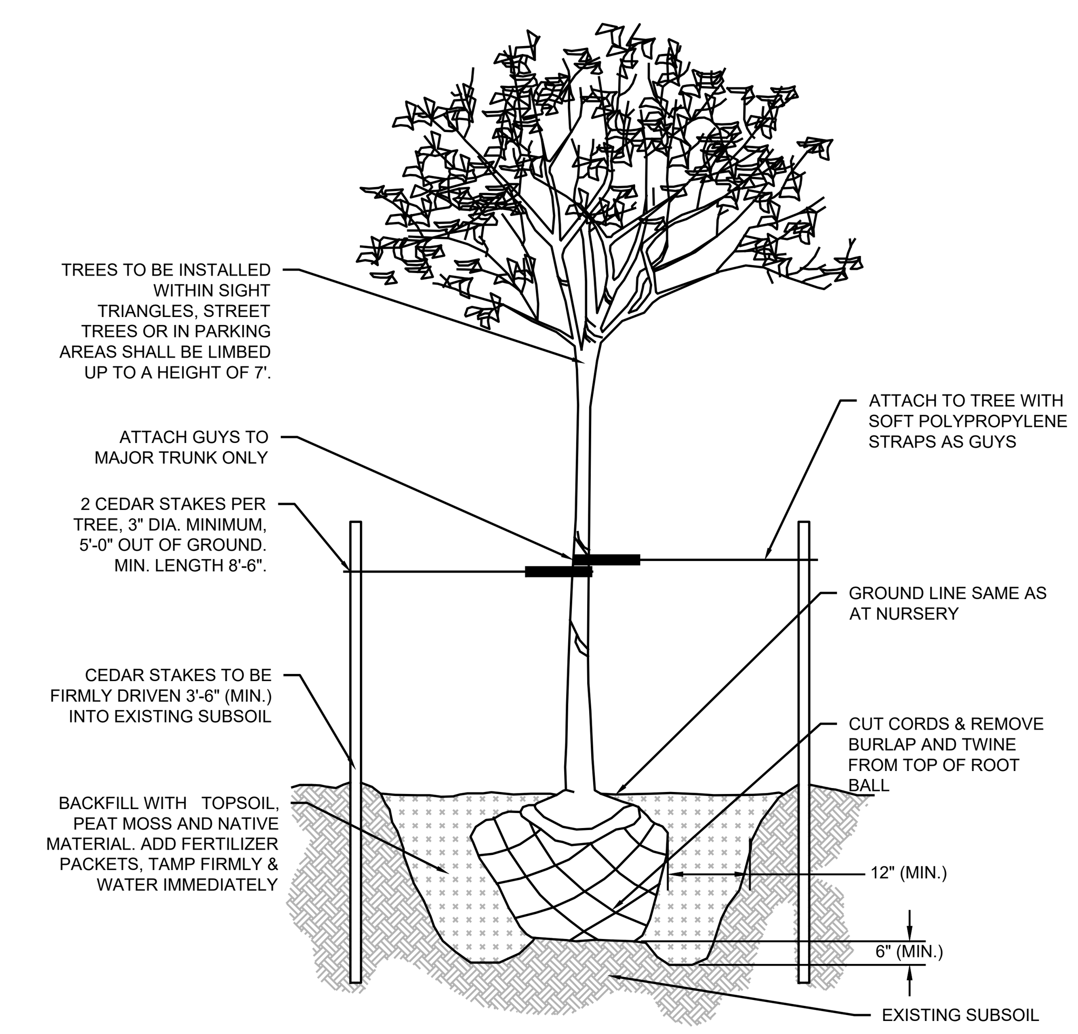


GROUND COVER PLANTING
N.T.S.



NOTES:
1. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING.
2. WATER THROUGHLY IMMEDIATELY FOLLOWING PLANTING.

SHRUB PLANTING
NTS



NOTE:
FOR TREES OTHER THAN STREET TREES, PROVIDE RIGID, PLASTIC OPEN MESH TRUNK GUARDS FOR DEER PROTECTION.

TREE PLANTING & STAKING DETAIL
NTS

GENERAL LANDSCAPE MAINTENANCE NOTES

1. LAWNS (MAINTAINED TURF AREAS): ALL MAINTAINED LAWNS SHALL BE AT A MOWN HEIGHT OF 2.5"-3". THE CUT SHALL NOT REMOVE MORE THAN 1/3 OF THE BLADE HEIGHT THEREFORE LAWN SHALL BE MOWED WHEN IT REACHES A HEIGHT OF 3.5"-4". LIME, FERTILIZER AND OTHER SOIL AMENDMENTS SHALL BE APPLIED AT REGULAR INTERVALS BASED UPON SOIL TESTS AND RECOMMENDATIONS FROM A CERTIFIED SOIL TESTING LAB. SUCH SOIL TESTS SHALL BE PERFORMED ONCE A YEAR IN EARLY MARCH. AT LARGER SITES, SEVERAL SOIL SAMPLES AND TESTS SHALL BE TAKEN FOR THE VARIOUS AREAS OF THE SITE.
2. PLANTING BEDS: ALL PLANTING BEDS SHALL BE EDGED (3"-4" DEEP AND WIDE V-GROOVE EDGE BETWEEN TURF AND MULCH BEDS) AND MULCH REPLENISHED AS NECESSARY (MINIMUM 3 TIMES PER YEAR) TO MAINTAIN 3"-4" DEPTH OF MULCH UNLESS THE GROUNDCOVER OR PLANTING HAS COMPLETELY COVERED THE BED, PRECLUDING THE NEED FOR MULCH. ALL BEDS SHALL BE MAINTAINED FREE OF WEEDS AND PLANT DEBRIS.
3. PRUNING: ALL PLANTS SHALL BE PERIODICALLY PRUNED OF DEAD, DAMAGED OR DISEASED BRANCHES TO MAINTAIN THE VIGOR OF THE PLANT AND MAINTAIN A SAFE CONDITION. PRUNING SHALL MAINTAIN THE NATURAL FORM OR HABIT OF THE PLANT UNLESS A FORMAL HEDGE HAS BEEN SPECIFIED BY THE LANDSCAPE ARCHITECT. FLOWERING SHRUBS AND TREES SHOULD BE PRUNED AFTER FLOWERING TO LIMIT IMPACT UPON FOLLOWING SEASON FLOWER BUDS UNLESS SAFETY CONCERNS WARRANT IMMEDIATE PRUNING. HEDGES SHALL BE SHEARED TO A TRAPEZOIDAL FORM TO PREVENT SHADING OF LOWER BRANCHES.
4. IRRIGATION: ALL PLANTS AND LAWN AREAS SHALL BE IRRIGATED OR WATERED AS NECESSARY TO MAINTAIN VIGOROUS AND HEALTHY GROWTH. THE UNDERGROUND IRRIGATION SYSTEM SHALL BE PERIODICALLY INSPECTED AND MAINTAINED AS PER MANUFACTURER'S RECOMMENDATIONS TO ASSURE PROPER APPLICATION.
5. CHEMICAL APPLICATIONS: FUNGICIDES, HERBICIDES AND PESTICIDES SHALL BE APPLIED ONLY AS NECESSARY TO TREAT SPECIFIC PROBLEMS AS THEY ARE OBSERVED. ALL TREATMENTS SHALL BE PERFORMED BY TRAINED AND LICENSED PERSONNEL IN ACCORDANCE WITH ALL REGULATIONS.
6. FLOWER BEDS: SEASONAL PLANTING BEDS SHALL BE PLANTED IN SPRING, SUMMER AND FALL AS SPECIFIED. PERENNIAL VEGETATION SHALL BE REMOVED AS APPROPRIATE IN THE FALL. ORNAMENTAL GRASSES SHALL BE CUT IN THE SPRING TO PROMOTE PROPER PLANT GROWTH AND A NEAT, CLEAN APPEARANCE, BUT NOT DIMINISH THEIR WINTER INTEREST.
7. PAVEMENTS: ALL PAVEMENTS INCLUDING STREETS, PATIOS, SIDEWALKS, BIKEWAYS, ETC. SHALL BE MAINTAINED FREE OF LITTER, GRASS CLIPPINGS, STAINS, SNOW AND ICE, DEBRIS, LEAVES, BRANCHES AND FRUIT. BENCHES AND STREET FURNISHINGS SHOULD BE PERIODICALLY CLEANED. DEBRIS, LEAVES AND BRANCHES SHALL BE REMOVED FROM ALL STORM WATER GRATES, CHANNELS AND APRONS.
8. PLANT MATERIAL: PLANT MATERIAL WHICH ARE NOT GROWING IN A VIGOUROUS MANNER AND ANY DEAD PLANTS SHALL BE REPLACED AS NECESSARY TO ACHIEVE INTENDED DESIGN DURING THE NEXT SPRING OR FALL PLANTING SEASON IN ORDER TO MAINTAIN THE INTEGRITY OF THE ORIGINAL LANDSCAPE DESIGN.
9. GREENBELT AREAS: DESIGNATED GREENBELT AREAS ARE TO REMAIN UNDISTURBED EXCEPT FOR THE NECESSARY REMOVAL OF ANY DEAD, DIESEASED OR DAMAGED TREES THAT WILL COMPROMISE THE HEALTH, SAFETY OR WELFARE OF THE PUBLIC. TOWNSHIP LANDSCAPE ARCHITECT SHALL BE NOTIFIED PRIOR TO ANY DISTURBANCE FOR WHATEVER REASON IN ANY GREENBELT AREA.
10. MEADOW OPEN SPACE: THE INTENT OF THE MEADOW OPEN SPACE AREA IS HARBOR GROWTH FOR SUCCESSIONAL WOODLAND DEVELOPMENT. NO DISTURBANCE OR MOWING SHALL TAKE PLACE IN THESE AREAS EXCEPT THE REMOVAL OF DEBRIS, WEEDS, ETC. AS APPROVED BY THE TOWNSHIP LANDSCAPE ARCHITECT.
11. PONDS FENCE: THE EDGE OF THE WET PONDS SHALL BE CLEANED OF ALL WEEDS AND DEBRIS ON A MONTHLY BASIS. THE BIOLOGS SHALL BE SECURED IN PLACE AND CHECKED TWO TIMES PER YEAR. PLANTING BEDS SHALL BE MULCHED AS NOTED ABOVE.
12. POND AERATOR: POND AERATORS ARE TO BE MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND WARRANTY REQUIREMENTS.

SEE SHEET C101 FOR PLAN NOTES

File: X:\Jobs\2462 - JS Pro Construction\25-2462-02 - 12010 Long Beach Boulevard_Long Beach Township, NJ\25246202CAD\dwg\C700 Construction Details.dwg, --> C602 Landscape Lighting Details
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PROJECT INFORMATION

PROJECT NAME:
PROPOSED MIXED-USE BUILDING

PROJECT LOCATION:
BLOCK 8.17, LOT 15
12010 LONG BEACH BOULEVARD.
LONG BEACH TOWNSHIP,
OCEAN COUNTY, NJ

OWNER:
LSH HOLDINGS LLC
28 RODEO DRIVE
WEST CREEK, NJ 08092

APPLICANT:
LSH HOLDINGS LLC
28 RODEO DRIVE
WEST CREEK, NJ 08092

APPLICANT'S PROFESSIONALS

ARCHITECT:
HAND LINE ARCHITECT
128 BARTLETT AVENUE,
WEST CREEK, NJ 08092

SURVEYOR:
GRAVATT CONSULTING GROUP
414 LACEY ROAD
FORKED RIVER, NJ 08731

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RABAN & RABAN
11710 LONG BEACH BLVD.
LONG BEACH TOWNSHIP, NJ 08008

INSITE ENGINEERING, LLC SINCE 2003

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(at least 3 days prior to excavation)

INSITE Engineering • Surveying • Planning

InSite Engineering, LLC
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165 CHESTNUT STREET, SUITE 200, ALLENDALE, NJ 07401
20 N. MAIN STREET, SUITE 2B, MANAHAWKIN, NJ 08050
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DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
0	06/12/25	INITIAL RELEASE

SCALE: AS SHOWN	DESIGNED BY: JMW
DATE: 06/12/25	DRAWN BY: M-S
JOB #: 25-2462-02	CHECKED BY: DDC

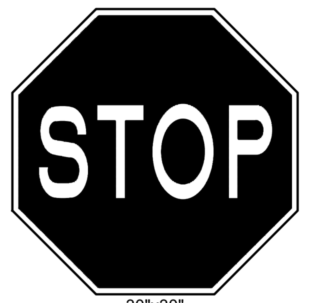
☒ NOT FOR CONSTRUCTION
APPROVED BY:
☐ FOR CONSTRUCTION

PLAN INFORMATION

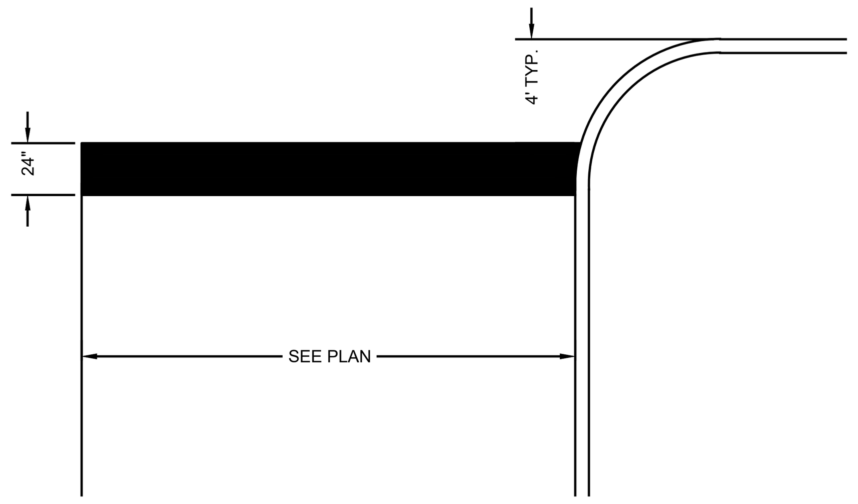
DRAWING TITLE:
PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:
LANDSCAPE & LIGHTING DETAILS

SHEET NO:
C602



STOP SIGN (R1-1)
NTS



STOP BAR
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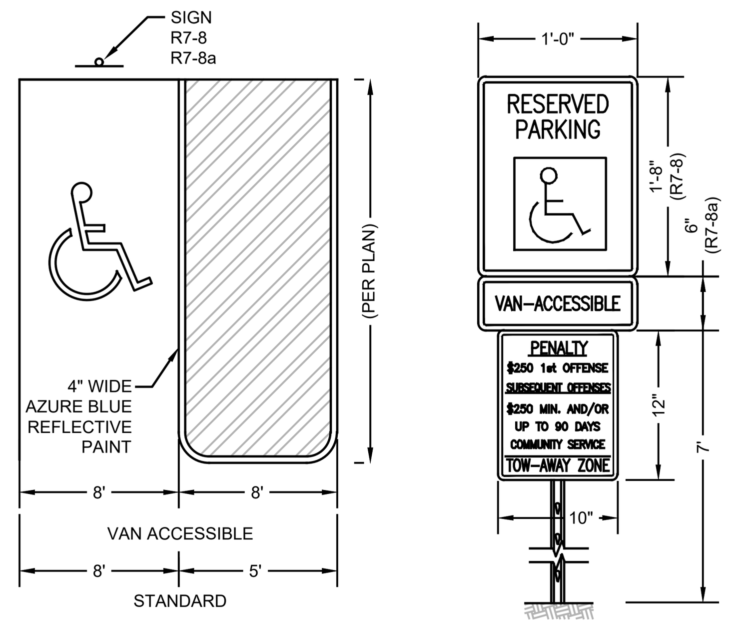
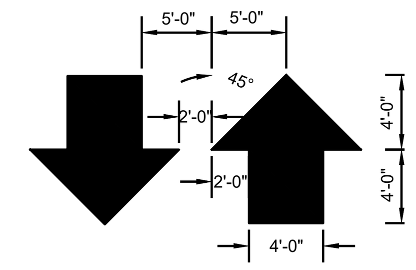
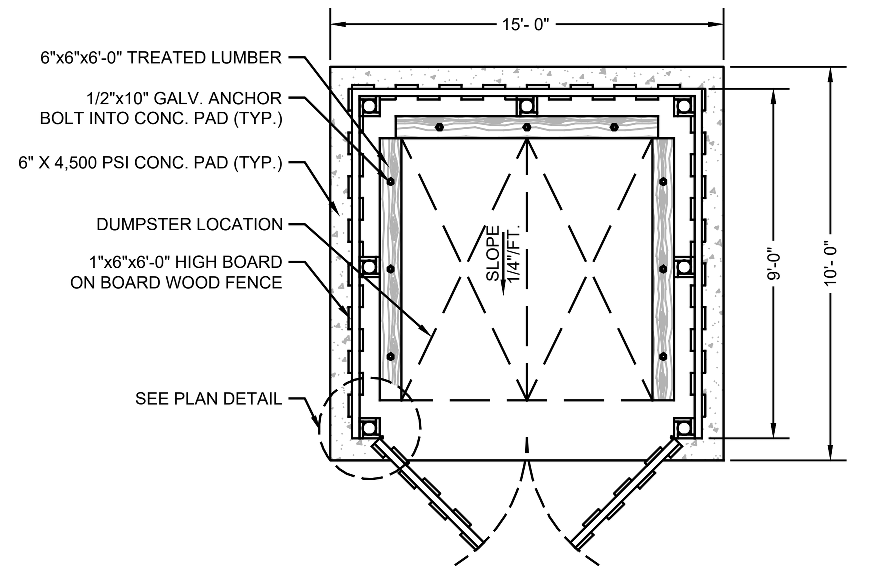


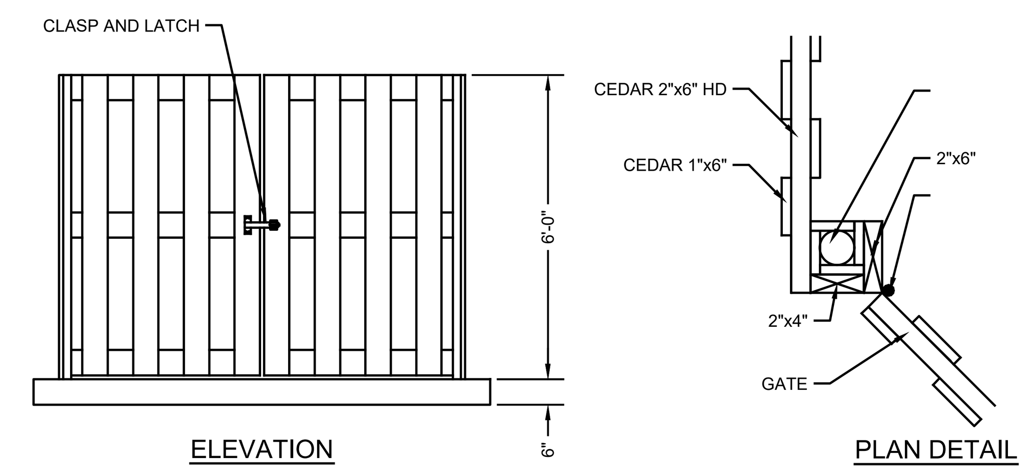
ACCESSIBLE PARKING STALL
NTS



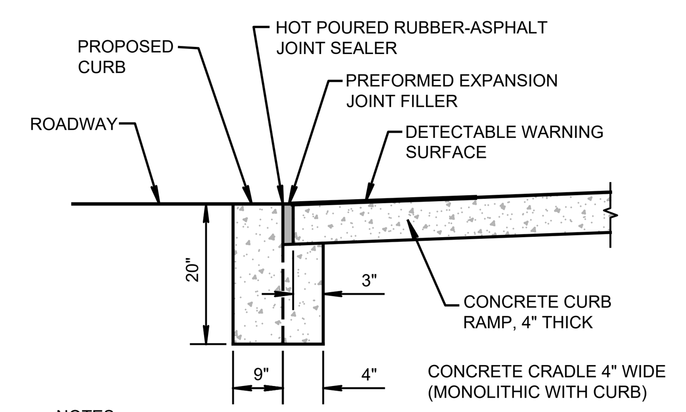
NOTE:
1. ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN SECION 3B OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"
2. THESE ARROWS ARE TO BE PAINTED REFLECTIVE WHITE.

TRAFFIC ARROW PAVEMENT MARKINGS
NTS





BOARD ON BOARD DUMPSTER PAD ENCLOSURE
NTS

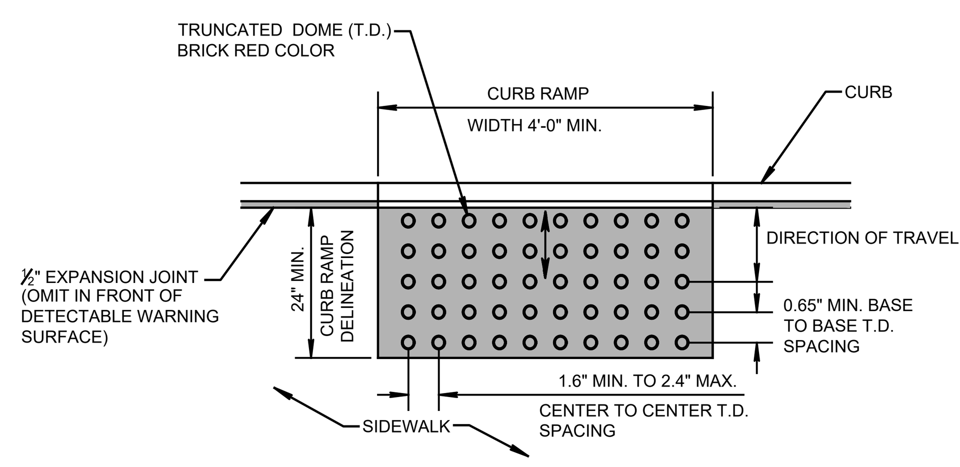


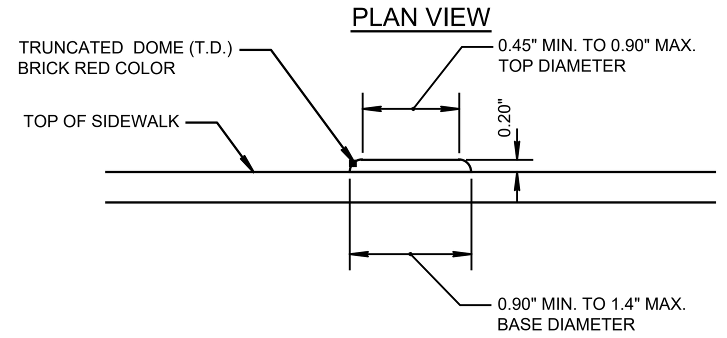
NOTES:
1. IN LIEU OF THE ABOVE DETAIL, CURB AND SIDEWALK RAMP MAY BE POURED MONOLITHICALLY AS APPROVED BY THE ENGINEER.
2. ALL FULL CURB DEPRESSIONS SHALL BE CONSTRUCTED OF CONCRETE, REGARDLESS OF THE CURB TYPE THROUGHOUT THE PROJECT.

DROPPED CURB AND CRADLE
NOT TO SCALE

GENERAL NOTES:
1. LANDING AREA, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP SHALL BE KEPT CLEAR.
2. DIMENSIONS SHOWN IN TABLES ARE FOR RELATIVELY FLAT SIDEWALK AREAS. CARE SHOULD BE TAKEN WHEN DETERMINING CURB RAMP SIZE BASED ON CURB HEIGHT (H) WHERE ELEVATION OF CURB AND SIDEWALK VARY DRASTICALLY IN AREA OF PROPOSED CURB RAMP.
3. CURB (DROPPED CURB) GUTTERLINE SHALL BE FLUSH WITH ROADWAY PAVEMENT A MINIMUM OF 4 FEET AT ALL CURB RAMPS, EXCEPT THAT CURB RAMP TYPE 6 SHALL BE A MINIMUM OF 5 FEET.
4. FOR CURB RAMP TYPES 5 AND 6, IF A GRASS BUFFER DOES NOT EXIST, SLOPE CURB TO EQUAL SLOPE OF ADJACENT CURB RAMP.
5. WHERE THE DISTANCE FROM THE GUTTER LINE TO THE OUTSIDE EDGE OF SIDEWALK IS 6 FEET OR LESS, THE SIDEWALK CURB RAMP DELINEATION (SHADED AREA) SHALL BE SAFETY RED IN COLOR ON 70% COLOR CONTRAST FOR OTHER SURFACES SUCH AS CONCRETE AT BRICK.
6. WHERE THE DISTANCE FROM THE GUTTER LINE TO THE OUTSIDE EDGE OF THE SIDEWALK IS 6 FEET OR LESS, CURB RAMP TYPE 7 SHOULD BE USED, INSTEAD OF CURB RAMP TYPES 1 THROUGH 4.
7. DIMENSIONS SHOWN ON THE TABLES ARE FOR 4, 6, OR 8 INCH CURB HEIGHTS, WHERE THE CURB HEIGHTS ARE OTHER THAN WHAT IS PROVIDED IN THE TABLES, THE DIMENSIONS OF THE RAMPS WILL HAVE TO BE CALCULATED BASED ON THE CROSS SLOPES SHOWN.
8. ALL FULL CURB DEPRESSIONS SHALL BE CONSTRUCTED OF CONCRETE, REGARDLESS OF THE CURB TYPE THROUGHOUT THE PROJECT.

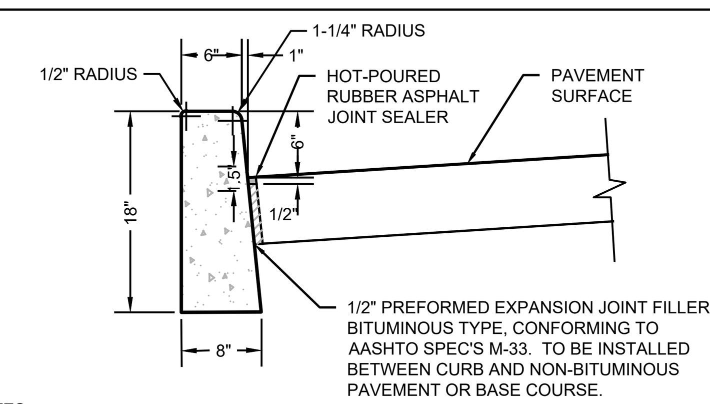
ADA ACCESSIBLE SIDEWALK AND CURB RAMPS
NTS





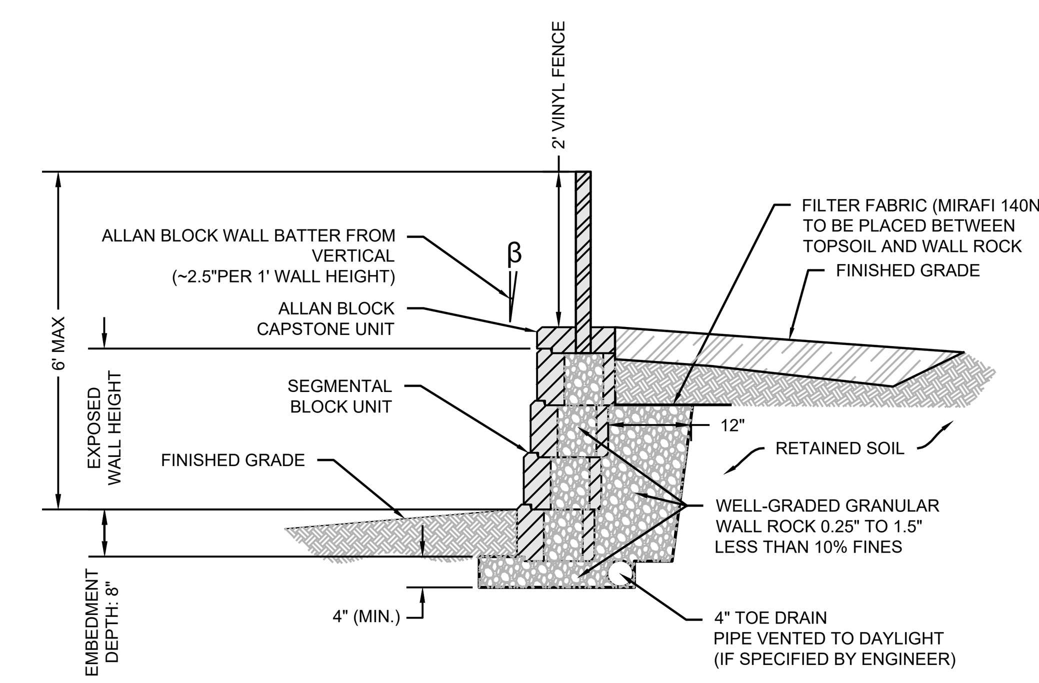
NOTE:
CONTRACTOR SHALL PROVIDE A DETECTABLE WARNING SURFACE SUBMITTAL TO PROJECT ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.

DETECTABLE WARNING SURFACE
NTS



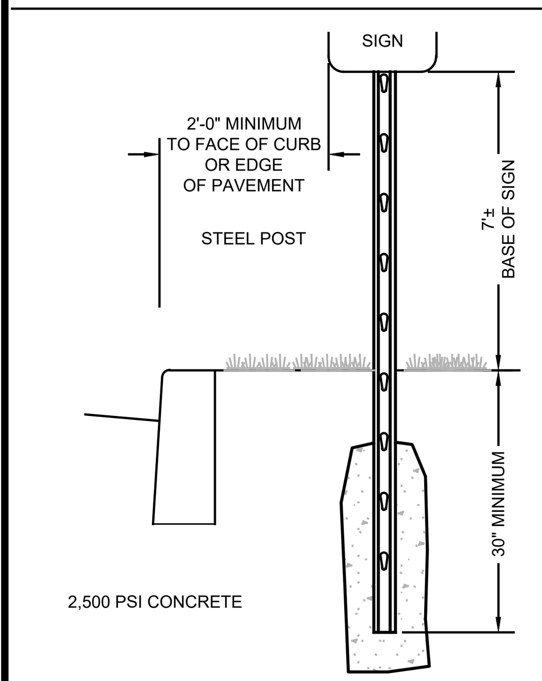
NOTES:
1. CONCRETE TO BE NJDOT CLASS "B" (AIR ENTRAINED).
2. TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 20' - 0" APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS-IMPREGNATED FIBER JOINT FILLER, COMPLYING WITH THE REQUIREMENTS OF AASHTO M-213, RECESSED 1/4" FROM THE FRONT FACE AND TOP OF THE CURB.
3. DUMMY JOINTS (FORMED) SHALL BE INSTALLED MIDWAY BETWEEN EXPANSION JOINTS.
4. WIDTH OF JOINT FILLER STRIP EQUAL TO THE THICKNESS OF THE PAVEMENT LESS 1/2".
5. CURB SHALL BE SAW CUT TO THE NEAREST JOINT TO AIDE IN THE BLENDING OF NEWLY CONSTRUCTED CURB WITH EXISTING CURB.

CONCRETE VERTICAL CURB
NTS



NOTES:
1. CONTRACTOR TO PROVIDE ALLAN BLOCK WALL MATERIAL SUBMITTAL TO PROJECT ENGINEER FOR APPROVAL PRIOR TO PURCHASE.
2. WALL DESIGN BASED UPON NO SURCHARGE LOADING AND NOT IN A SATURATED CONDITION.
3. SUBGRADE CONDITIONS AND COMPACTION SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE INSTALLATION OF THE WALL.

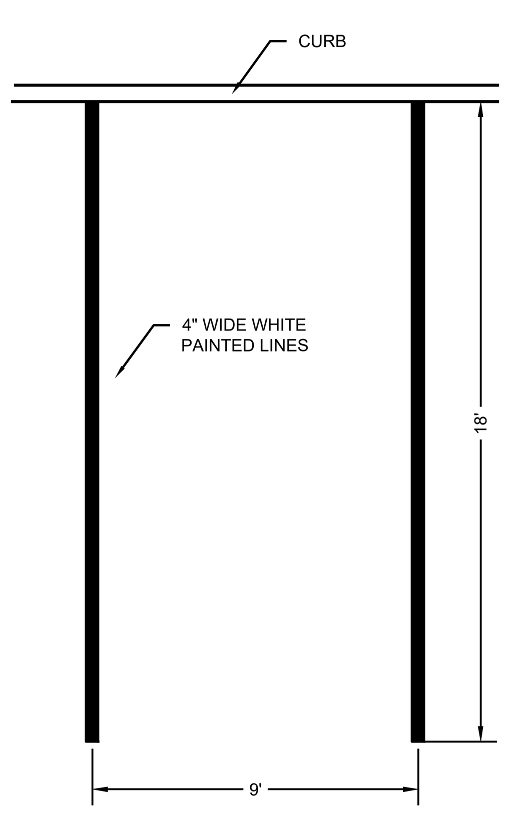
RETAINING WALL WITH VINYL FENCE
NTS
(NOT FOR CONSTRUCTION)



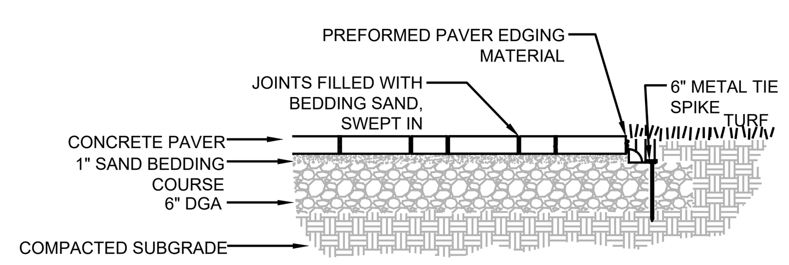
NOTES:
1. ALL SIGNS SHALL BE MINIMUM 18 GUAGE STEEL WITH BAKED ON ENAMEL FINISH. PROVIDE WITH PRE-PUNCHED MOUNTING HOLES.
2. POSTS: 2" STEEL U-CHANNEL BREAKAWAY POST.
3. SIGNS AND POSTS SHALL BE IN ACCORDANCE WITH LOCAL ORDINANCE AND MEET THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

SIGN POST
NTS

SEE SHEET C101 FOR PLAN NOTES



PARKING STRIPING
NTS



CONCRETE PAVER DRIVEWAY
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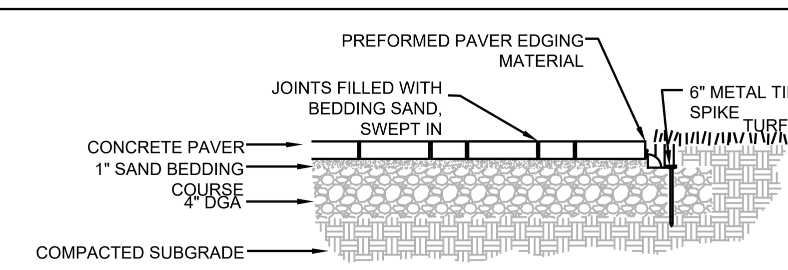
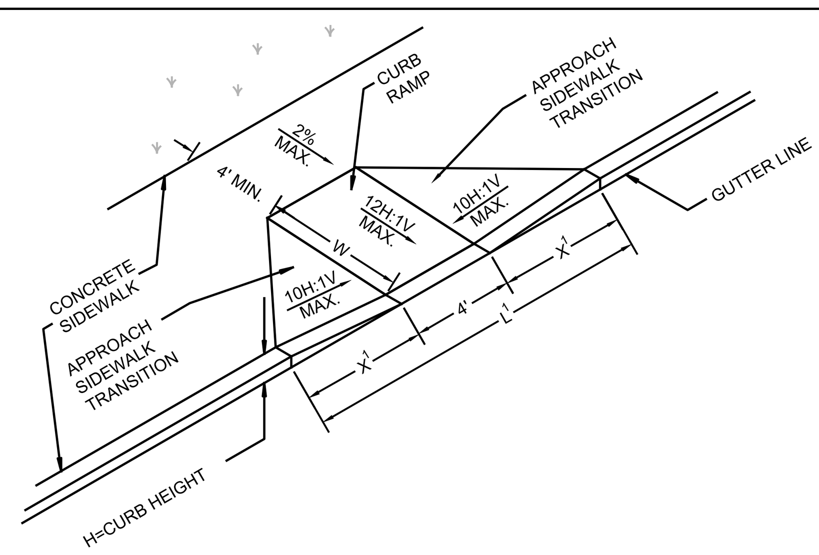


CONCRETE PAVER WALKWAY
NTS



CURB RAMP TYPE 1
NTS

RESIDENT PARKING ONLY SIGN
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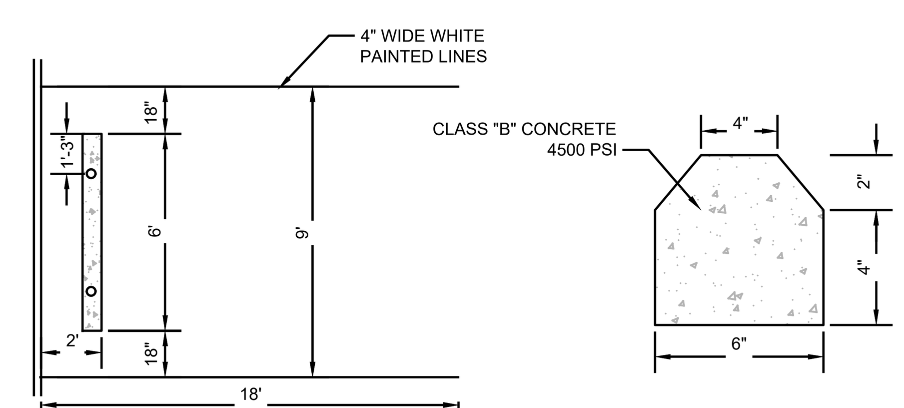

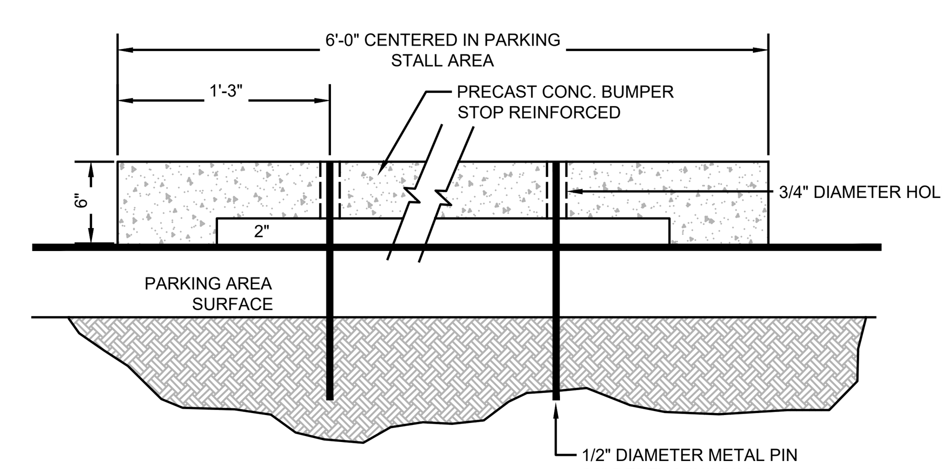

PRECAST CONCRETE WHEEL STOP
NTS

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MIXED-USE BUILDING

PROJECT LOCATION:
BLOCK 8.17, LOT 15
12010 LONG BEACH BOULEVARD.
LONG BEACH TOWNSHIP,
OCEAN COUNTY, NJ

OWNER:
LSH HOLDINGS LLC
28 RODEO DRIVE
WEST CREEK, NJ 08092

APPLICANT:
LSH HOLDINGS LLC
28 RODEO DRIVE
WEST CREEK, NJ 08092

APPLICANT'S PROFESSIONALS

ARCHITECT:
HAND LINE ARCHITECT
128 BARTLETT AVENUE,
WEST CREEK, NJ 08092

SURVEYOR:
GRAVATT CONSULTING GROUP
414 LACEY ROAD
FORKED RIVER, NJ 08731

ATTORNEY:
RABAN & RABAN
11710 LONG BEACH BLVD.
LONG BEACH TOWNSHIP, NJ 08008

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NJ ONE CALL.....800-272-1000
(at least 3 days prior to excavation)

InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
165 CHESTNUT STREET, SUITE 200, ALLENDALE, NJ 07401
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732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

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NJ PE 24GE05331000

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DATE: 06/12/25	DRAWN BY: M-S
JOB #: 25-2462-02	CHECKED BY: DDC

☒ NOT FOR CONSTRUCTION
APPROVED BY:
☐ FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:
PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:
CONSTRUCTION DETAILS

SHEET NO:
C700

File: X:\Jobs\2462 – JS Pro Construction\25-2462-02 – 12010 Long Beach Boulevard_Long Beach Township, NJ\25246202CAD\dwg\C700 Construction Details.dwg, ---> C700 Construction Details
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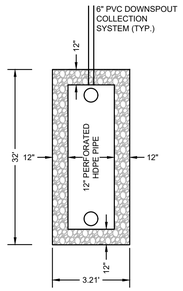
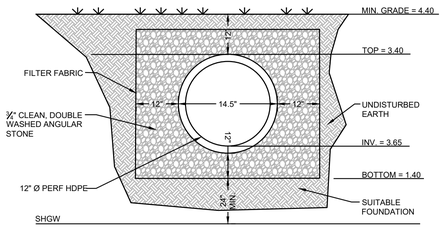


DRYWELL SYSTEM PLAN VIEW

NTS



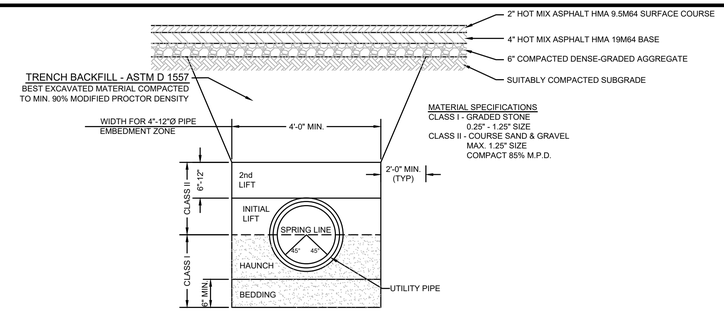
*ONTRACTOR SHALL VERIFY SHGW WITH ENGINEER PRIOR TO CONSTRUCTION.
*DRYWELL SHALL FULLY DRAIN WITHIN 72 HOURS.

DRYWELL SYSTEM SECTION VIEW

NTS

NOTES:

1. 1 LINEAR FOOT OF RECHARGE TRENCH IS TO BE PROVIDED FOR EVERY 100 S.F. OF BUILDING AREA.
2. ALL ROOF LEADERS TO BE CONNECTED TO A TRENCH.
3. THE TRENCH SHALL BE A MIN. OF 5' FROM THE DWELLING.
4. ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
5. ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES.
6. MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO THE BACKFILL MATERIAL, WHEN REQUIRED. SEE ASTM D2321.
7. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO AN APPROPRIATE DEPTH AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
8. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I OR II. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).
9. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I OR II IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
10. MINIMUM COVER: MINIMUM COVER OVER ALL RETNETION/DETENTION SYSTEMS IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" UP TO 36" DIAMETER PIPE AND 24" OF COVER FOR 42" - 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

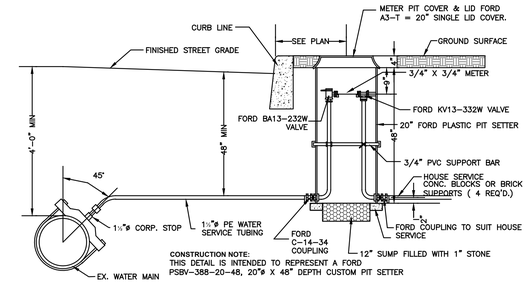


WET AND DRY CONDITIONS

PAVEMENT NOTE: MATERIALS FOR ASPHALT CONCRETE SURFACE SHALL CONFORM TO SECTION 404.02 OF THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (1989). MATERIALS FOR ASPHALT CONCRETE BASE SHALL CONFORM TO SECTIONS 301.02 AND 304.02 OF THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (1989).

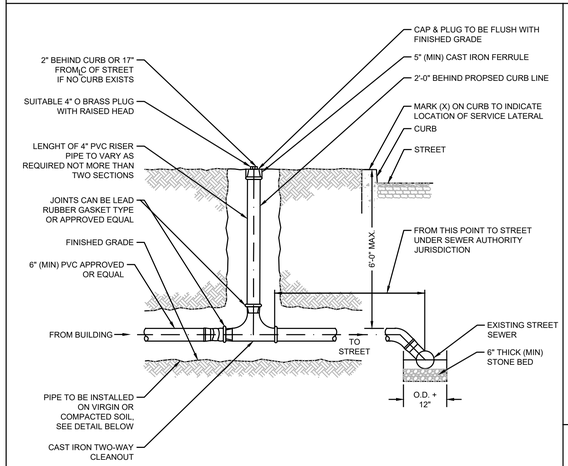
UTILITY TRENCH & PAVEMENT REPAIR

NTS



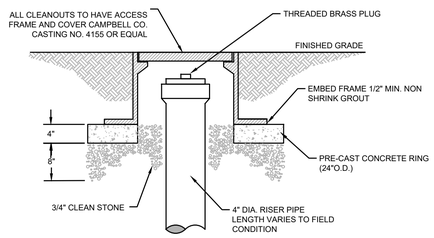
DOMESTIC METER PIT OR APPROVED EQUAL

NTS



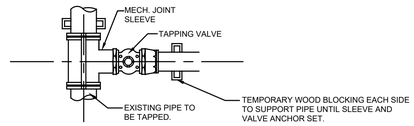
SANITARY SEWER LATERAL CONNECTION

N.T.S.



SANITARY SEWER CLEANOUT FRAME AND COVER

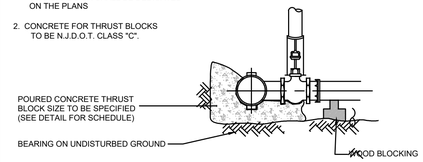
NTS



PLAN

NOTES:

1. SIZE AND BEARING AREA FOR THRUST BLOCKS SHALL CONFORM TO CURRENT STANDARDS OR SHALL BE DEDICATED ON THE PLANS
2. CONCRETE FOR THRUST BLOCKS TO BE N.J.D.O.T. CLASS "C".

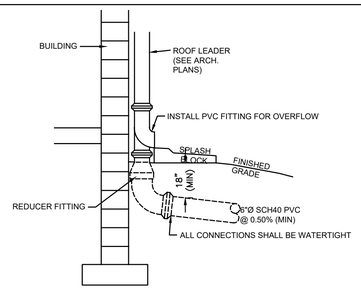


ELEVATION

TAPPING VALVE AND SLEEVE ASSEMBLY
WET TAP ASSEMBLY

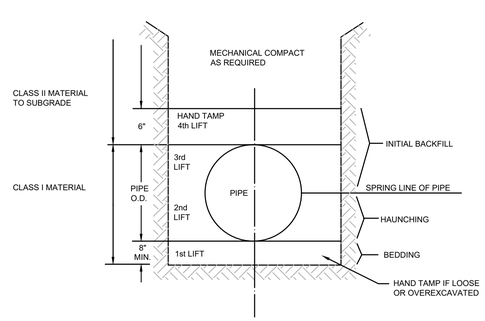
NTS

NOTE: THE CONTRACTOR SHALL FURNISH AND INSTALL TAPPING SLEEVES WITH COMPATABLE TAPPING VALVES.



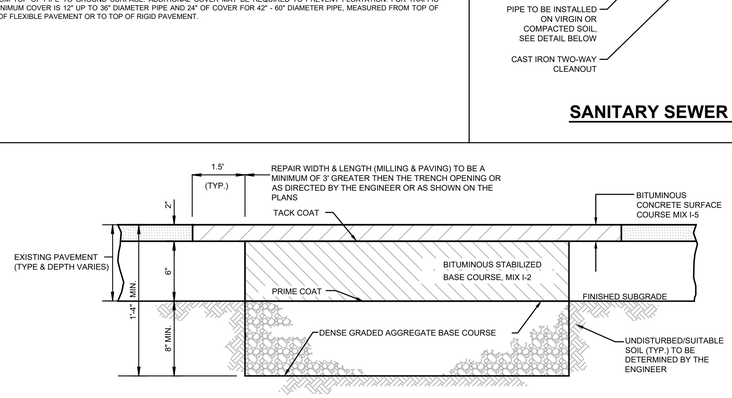
EXTERIOR DOWNSPOUT COLLECTOR

NTS



PIPE BEDDING DETAIL

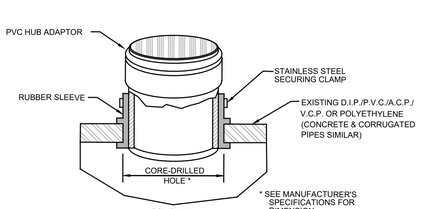
NTS



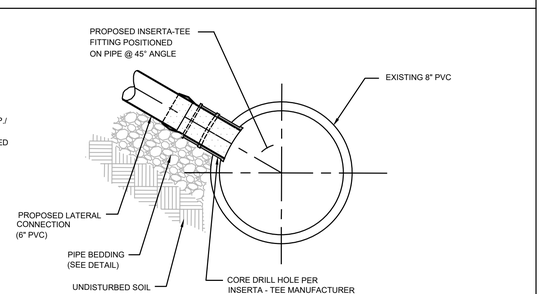
ROADWAY EXCAVATION/REPAIR/EXISTING STREETS

NTS

CONSTRUCTION NOTES:
1.INFRARED PAVEMENT REPAIR FOR THE CITY RIGHT-OF-WAY IMPROVEMENTS



NOTES:
1. RUBBER SLEEVE SHALL CONFORM TO ASTM-C443.
2. SECURING CLAMP SHALL BE SS#301 (BEND AND HOUSING), SS#305 (SCREW)
3. HUB ADAPTOR SHALL BE PVC PER ASTM D3034 (SDR SAME AS LATERAL PIPE).



SANITARY SEWER INSERTA TEE CONNECTION

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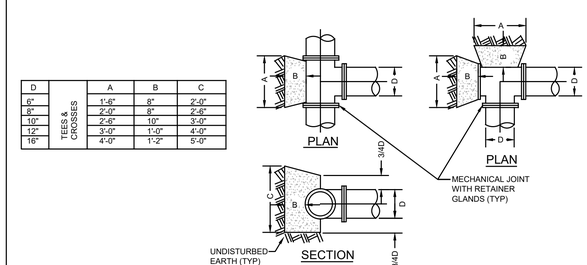
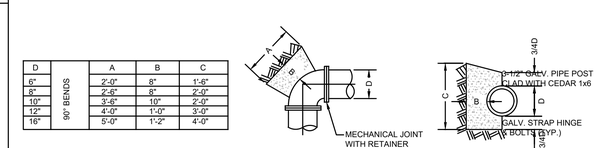
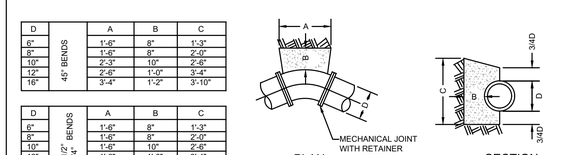


D		A	B	C
6"	TEES & CROSSES	1'-6"	8"	2'-0"
8"		2'-0"	8"	2'-6"
10"		2'-6"	10"	3'-0"
12"		3'-0"	1'-0"	4'-0"
16"		4'-0"	1'-2"	5'-0"



D		A	B	C
6"	90° BENDS	2'-0"	8"	1'-6"
8"		2'-6"	8"	2'-0"
10"		3'-6"	10"	2'-0"
12"		4'-0"	1'-0"	3'-0"
16"		5'-0"	1'-2"	4'-0"



D		A	B	C
6"	45° BENDS	1'-6"	8"	1'-3"
8"		1'-6"	8"	2'-0"
10"		2'-3"	10"	2'-6"
12"		2'-6"	1'-0"	3'-4"
16"		3'-4"	1'-2"	3'-10"

D		A	B	C
6"	22 1/2" 11 1/4" BENDS	1'-6"	8"	1'-3"
8"		1'-6"	8"	2'-0"
10"		1'-6"	10"	2'-6"
12"		1'-6"	1'-0"	3'-4"
16"		2'-0"	1'-2"	3'-10"

THRUST BLOCK DETAILS

N.T.S.

SEE SHEET C101 FOR PLAN NOTES

File: X:\Jobs\2462 - JS Pro Construction\25-2462-02 - 12010 Long Beach Boulevard_Long Beach Township, NJ\22462022CAD\dwg\C700 Construction Details.dwg, ---> C701 Construction Details
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PROJECT INFORMATION

PROJECT NAME:

PROPOSED MIXED-USE BUILDING

PROJECT LOCATION:
BLOCK 8.17, LOT 15
12010 LONG BEACH BOULEVARD.
LONG BEACH TOWNSHIP,
OCEAN COUNTY, NJ

OWNER:
LSH HOLDINGS LLC
28 RODEO DRIVE
WEST CREEK, NJ 08092

APPLICANT:
LSH HOLDINGS LLC
28 RODEO DRIVE
WEST CREEK, NJ 08092

APPLICANT'S PROFESSIONALS

ARCHITECT:
HAND LINE ARCHITECT
128 BARTLETT AVENUE,
WEST CREEK, NJ 08092

SURVEYOR:
GRAVATT CONSULTING GROUP
414 LACEY ROAD
FORKED RIVER, NJ 08731

ATTORNEY:
RABAN & RABAN
11710 LONG BEACH BLVD.
LONG BEACH TOWNSHIP, NJ 08008

CALL BEFORE YOU DIG!
NJ ONE CALL.....800-272-1000
(at least 3 days prior to excavation)

InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
165 CHESTNUT STREET, SUITE 200, ALLENDALE, NJ 07401
20 N. MAIN STREET, SUITE 2B, MANAHAWKIN, NJ 08050
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DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev. #	Date	Comment
0	06/12/25	INITIAL RELEASE

SCALE: AS SHOWN	DESIGNED BY: JMW
DATE: 06/12/25	DRAWN BY: M-S
JOB #: 25-2462-02	CHECKED BY: DDC

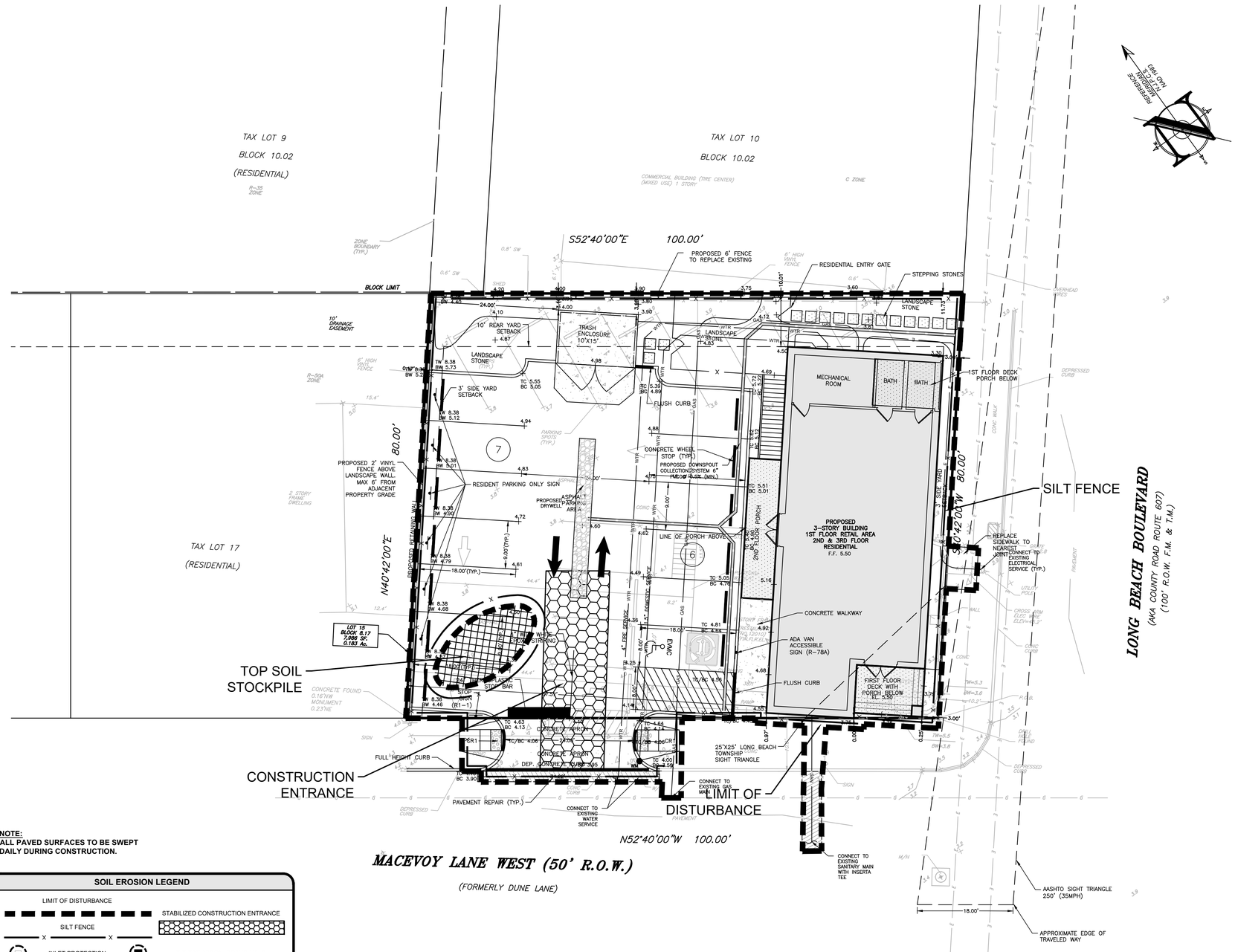
NOT FOR CONSTRUCTION
APPROVED BY:
FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:
PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:
CONSTRUCTION DETAILS

SHEET NO:
C701



10 0 10 20

SCALE : 1" = 10'

LEGEND

EXISTING		PROPOSED
	BOUNDARY LINE	
10	CONTOUR LINE	10
+ 46.80	SPOT ELEVATION	+ 46.80
	BUILDING	
	WALL	
G G	GAS	GAS
W W	WATER	WTR
	INLET	
	STORM	
	SANITARY MAIN	
SAN.	SANITARY LATERAL	SAN. CO
OH	OVERHEAD WIRE	O/H
E E	ELECTRIC	E
T T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
x x	FENCE	x x
	LIGHT FIXTURE	
TP-1	TEST PIT LOCATION	TP-1
	GRADE FLOW ARROW	
	SWALE CENTER LINE	℄

SEE SHEET C101 FOR PLAN NOTES

NOTE:
ALL PAVED SURFACES TO BE SWEPT DAILY DURING CONSTRUCTION.

SOIL EROSION LEGEND

- LIMIT OF DISTURBANCE
- SILT FENCE
- INLET PROTECTION
- PROPOSED TREE PROTECTION
- SOIL COMPACTION TEST LOCATION
- STABILIZED CONSTRUCTION ENTRANCE
- RIP-RAP APRON, SCOUR HOLE
- SOIL RESTORATION AREA

CONSTRUCTION / SPPP NOTE

THIS PLAN WAS PREPARED TO ADDRESS THE SOIL EROSION AND SEDIMENT CONTROL COMPONENT OF THE STORMWATER POLLUTION PREVENTION PLAN (SPPP) AT THE TIME OF DESIGN ONLY. ALL OTHER COMPONENTS OF THE SPPP AND GENERAL STORMWATER PERMIT ARE TO BE THE RESPONSIBILITY OF THE DEVELOPER AND/OR THE SITE CONTRACTOR.

PLEASE NOTE - THIS PLAN IS NOT TO BE USED FOR SITE CONSTRUCTION.

TOTAL LIMIT OF DISTURBANCE = 0.19 AC.

File: X:\Jobs\2462 - JS Pro Construction\25-2462-02 - 12010 Long Beach Boulevard_Long Beach Township, NJ\25246202CAD\dwg\C800 SESC.dwg, ---> C800 SESC
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Douglas D. Clelland

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05531000

REVISIONS

Rev #	Date	Comment
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SCALE: 1"=10'	DESIGNED BY: JMW
DATE: 06/12/25	DRAWN BY: M-S
JOB #: 25-2462-02	CHECKED BY: DDC

NOT FOR CONSTRUCTION

APPROVED BY:
FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:
PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:
SOIL EROSION AND SEDIMENT CONTROL PLAN

SHEET NO:
C800

SOIL EROSION AND SEDIMENT CONTROL NOTES

OCSCD SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE DISTRICT INSPECTOR MAY REQUIRE ADDITIONAL SOIL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH "THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, 7TH EDITION, JANUARY 2014, REVISED JULY 2017." (SESC STANDARDS) ALL WORK IS TO BE DONE IN ACCORDANCE WITH THE STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
2. ALL WORK IS TO BE DONE IN ACCORDANCE WITH THE SESC STANDARDS.
3. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
4. 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. THE REVISED PLANS MUST MEET ALL CURRENT SESC STANDARDS. STANDARDS: HTTP://WWW.STATE.NJ.US/AGRICULTURE/DIVISIONS/ANR/NRC/NJEROSION.HTML
5. N.J.S.A 4:24-39 ET SEQ. REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BEFORE THERE HAS BEEN COMPLIANCE WITH PROVISIONS OF A CERTIFIED PLAN FOR PERMANENT MEASURES. ALL SITE WORK, AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS, MUST BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.
6. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED FOR MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL WITHIN 14 DAYS, AT A RATE OF 2 TO 2 ½ TONS PER ACRE AND ANCHORED IN PLACE ACCORDING TO THE SESC STANDARD FOR STABILIZATION WITH MULCH ONLY.
7. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E., STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF 1 ½ TO 2 TONS PER ACRE AND ANCHORED IN PLACE ACCORDING TO THE SESC STANDARDS.
8. 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.
9. ANY STEEP SLOPES (3:1 OR GREATER) OR ANY EXISTING ROADWAYS RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION CONTINUES.
10. THE SESC STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A STONE PAD USING CLEAN, CRUSHED, ANGULAR STONE (ASTM C-33, SIZE NO. 2 OR 3) AT ALL CONSTRUCTION DRIVEWAYS WHERE VEHICLES WILL ACCESS PAVED ROADWAYS FROM UNPAVED AREAS OF THE SITE.
11. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. AT THE TIME OF THE FINAL INSPECTION, YOU ARE REQUIRED TO PROVIDE CONFIRMATION THAT THE PROPER TYPE AND AMOUNT OF SEED, LIME AND FERTILIZER HAVE BEEN USED FOR PERMANENT STABILIZATION WORK. STRAW MULCH PROPERLY ANCHORED IN PLACE IS REQUIRED ON ALL SEEDING IN ACCORDANCE TO THE SESC STANDARDS.
12. 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.
13. IN ACCORDANCE WITH THE SESC STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE COVERED WITH A MINIMUM OF TWELVE (12) INCHES OF SOIL HAVING A PH OF 5 OR MORE PRIOR TO SEEDBED PREPARATION. AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED SHALL BE COVERED WITH A MINIMUM OF TWENTY-FOUR (24) INCHES OF SOIL HAVING A PH OF 5 OR MORE.
14. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL. CONDUIT OUTLET PROTECTION INSTALLATION SHALL BE POSTPONED IN BASINS ACTING AS SEDIMENT BASINS DURING CONSTRUCTION.
15. 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 SESC STANDARD FOR DEWATERING.
16. 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, MULCH SHALL BE APPLIED AND ANCHORED IN PLACE, OR OTHER DUST CONTROL METHOD SHALL BE EMPLOYED AS REQUIRED BY THE SESC STANDARD FOR DUST CONTROL.
17. 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 AN AMENDED SOIL EROSION AND SEDIMENT CONTROL PLAN. THE DISTRICT RESERVES THE RIGHT TO DETERMINE WHEN CERTIFICATION OF A NEW AND SEPARATE SOIL EROSION AND SEDIMENT CONTROL PLAN WILL BE REQUIRED FOR THESE ACTIVITIES.
18. ALL SOIL STOCKPILES ARE TO BE SURROUNDED WITH A SEDIMENT BARRIER AND STABILIZED IN ACCORDANCE WITH THE SESC STANDARDS. STOCKPILES SHOULD BE SITUATED SO AS TO NOT OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.
19. 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.

TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

1. SITE PREPARATION

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING, PG. 19-1.

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

2. SEEDBED PREPARATION

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

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

C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED IN ACCORDANCE WITH THE ABOVE.

D. SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, PG. 1-1.

3. SEEDING

A. TEMPORARY VEGETATIVE SEEDING COVER SHALL CONSIST OF PERENNIAL RYEGRASS APPLIED UNIFORMLY AT A RATE OF 1 POUND PER 1,000 SF (100 LBS/AC) WITH AN OPTIMUM SEED DEPTH OF 0.5" (TWICE THE DEPTH IF SANDY SOILS), IN ACCORDANCE WITH TABLE 7-2, PAGE 7-3.

*SEEDING DATES: 2/15-5/1 AND 8/15-10/15

B. CONVENTIONAL SEEDING. APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.

C. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK OR TRAILER MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION IV MULCHING) HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. POOR SEED TO SOIL CONTACT OCCURS REDUCING SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH ROCKS, STUMPS, ETC.

D. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

4. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

A. STRAW OR HAY. UNNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

APPLICATION. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRIS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.

2. MULCH NETTINGS. STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.

3. CRIMPER (MULCH ANCHORING TOOL). A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.

4. LIQUID MULCH-BINDERS. - MAY BE USED TO ANCHOR HAY OR STRAW MULCH.

a. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.

b. USE ONE OF THE FOLLOWING:

(1) ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.

(2) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

NOTE: ALL NAMES GIVE ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A COMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

B. WOOD-FIBER OR PAPER-FIBER MULCH. SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 PONDS PER ACRE (OR AS RECOMMENDED BY THE PROJECT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. THIS MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

C. PELLETIZED MULCH. COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORMA MULCH MAT. PELLETIZED MULCH SHALL BE APPLIES IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS./1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEE FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE.

APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

1. SITE PREPARATION

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.

B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.

C. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.

D. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

2. SEEDBED PREPARATION

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

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

C. HIGH ACID PRODUCING SOIL. SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.

3. SEEDING

(ZONE 6B)

A. SEED GERMINATION SHALL HAVE BEEN TESTED WITHIN 12 MONTHS OF THE PLANTING DATE. NO SEED SHALL BE ACCEPTED WITH A GERMINATION TEST DATE MORE THAN 12 MONTHS OLD UNLESS RETESTED.

SEED MIXTURE #13 FOR LAWN AREAS	PLANTING RATE LBS/1,000 (LBS/ACRE)
HARD FESCUE AND/OR CHEWING FESCUE AND/OR STRONG CREEPING RED FESCUE	4 (175)
PERENNIAL RYEGRASS	1 (45)
KENTUCKY BLUEGRASS (BLEND)	1 (45)

*ACCEPTABLE SEEDING DATES: 3/1-4/30 AND 5/1-8/14**
*OPTIMAL SEEDING DATES: 8/15-10/15
**SUMMER SEEDING SHALL ONLY BE CONDUCTED WHEN SITE IS IRRIGATED

SEED MIXTURE #7 FOR BASIN, SIDE SLOPES, AND SWALES	PLANTING RATE LBS/ 2,000 (LBS/ACRE)
STRONG CREEPING RED FESCUE	3 (130)
KENTUCKY BLUEGRASS	1 (50)
PERENNIAL RYEGRASS	0.5 (20)
OR REDTOP	0.25 (10)
PLUS WHITE CLOVER	0.10 (5)

*ACCEPTABLE SEEDING DATES: 3/1-4/30 AND 5/1-8/14**
*OPTIMAL SEEDING DATES: 8/15-10/15
**SUMMER SEEDING SHALL ONLY BE CONDUCTED WHEN SITE IS IRRIGATED

3. SEEDING RATES SPECIFIED ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO A REPORT OF COMPLIANCE INSPECTION. THESE RATES APPLY TO ALL METHODS OF SEEDING. ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVERAGE WITH THE SPECIFIED SEED MIXTURE FOR THE SEEDED AREA AND MOWED ONCE.

4. WARM-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT HIGH TEMPERATURES, GENERALLY 85O F AND ABOVE. SEE TABLE 4-3 MIXTURES 1 TO 7. PLANTING RATES FOR WARM-SEASON GRASSES SHALL BE THE AMOUNT OF PURE LIVE SEED (PLS) AS DETERMINED BY GERMINATION TESTING RESULTS.

5. COOL-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT TEMPERATURES BELOW 8 MANY GRASSES BECOME ACTIVE AT 65OF. SEE TABLE 4-3, MIXTURES 8-20. ADJUSTMENT OF PLANTING RATE COMPENSATE FOR THE AMOUNT OF PLS IS NOT REQUIRED FOR COOL SEASON GRASSES.

B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE-TEXTURED SOIL.

C. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

D. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK, OR TRAILER-MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT-FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION 4-MULCHING BELOW). HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.

4. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

A. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, TO BE APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

APPLICATION - SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT AT LEAST 85% OF THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.

2. MULCH NETTINGS - STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.

3. CRIMPER (MULCH ANCHORING COULTER TOOL) - A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.

4. LIQUID MULCH-BINDERS - MAY BE USED TO ANCHOR SALT HAY, HAY OR STRAW MULCH.

a. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.

b. USE ONE OF THE FOLLOWING:

(1) ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER-BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURF GRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.

(2) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND, FOLLOWING APPLICATION OF MULCH, DRYING AND CURING, SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. BINDER SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

B. WOOD-FIBER OR PAPER-FIBER MULCH - SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY JANUARY 2014GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. MULCH SHALL NOT BEMIXEDIN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

C.PELLETIZED MULCH-COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAYECTI CONTAIN CO-POLYMERS, TACKIFIERS,FERTILIZERS,AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO AW SEEDED AREA AND WATERED, FORM A MULCHMAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS/1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED, OR ON SITES WHERE STRAW MULCH AND TACKIFIERAGENT ARE NOT PRACTICAL OR DESIRABLE. APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEEDBED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

5.IRRIGATION (WHERE FEASIBLE)

IF SOIL MOISTURE IS DEFICIENT SUPPLY NEW SEEDING WITH ADEQUATE WATER (A MINIMUM OF 1/4 INCH APPLIED UP TO TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.

6.TOP DRESSING

SINCE SOIL ORGANIC MATTER CONTENT AND SLOW RELEASE NITROGEN FERTILIZER (WATER INSOLUBLE) ARE PRESCRIBED INSECTION 2A-SEEDBED PREPARATION IN THIS STANDARD, NO FOLLOW-UP OF TOP DRESSING IS MANDATORY. AN EXCEPTION MAYBE MADE WHERE GROSS NITROGEN DEFICIENCY EXISTS IN THE SOIL TO THE EXTENT THAT TURF FAILURE MAY DEVELOP. IN THAT INSTANCE, TOP DRESS WITH 10-10-10 OR EQUIVALENT AT 300 POUNDS PER ACRE OR 7 POUNDS PER 1,000 SQUARE FEET EVERY 3 TO 5 WEEKS UNTIL THE GROSS NITROGEN DEFICIENCY IN THE TURF IS AMELIORATED.

7.ESTABLISHING PERMANENT VEGETATIVE STABILIZATION

THE QUALITY OF PERMANENT VEGETATION RESTS WITH THE CONTRACTOR. THE TIMING OF SEEDING, PREPARING THE SEEDBED, APPLYING NUTRIENTS, MULCH AND OTHER MANAGEMENT ARE ESSENTIAL. THE SEED APPLICATION RATES IN TABLE 4-3 ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN APPLICATION RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO REQUESTING A REPORT OF COMPLIANCE FROM THE DISTRICT. THESE RATES APPLY TO ALL METHODS OF SEEDING. **ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVER (OF THE SEEDED SPECIES) AND MOWED ONCE.** NOTE THIS DESIGNATION OF MOWED ONCE DOES NOT GUARANTEE THE PERMANENCY OF THE TURF SHOULD OTHER MAINTENANCE FACTORS BE NEGLECTED OR OTHERWISE MISMANAGED.

STANDARD FOR DUST CONTROL

DEFINITION
THE CONTROL OF DUST ON CONSTRUCTION SITES AND ROADS.

PURPOSE
TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCED ON-SITE AND OFF-SITE DAMAGE AND HEALTH HAZARDS AND IMPROVE TRAFFIC SAFETY.

CONDITION WHERE PRACTICE APPLIES
THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON-SITE AND OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT. CONSULT WITH LOCAL MUNICIPAL ORDINANCES ON ANY RESTRICTION.

WATER QUALITY ENHANCEMENT
SEDIMENTS DEPOSITED AS "DUST" ARE OFTEN FINE COLLOIDAL MATERIAL WHICH IS EXTREMELY DIFFICULT TO REMOVE FROM WATER ONCE IT BECOMES SUSPENDED. USE OF THIS STANDARD WILL HELP TO CONTROL THE GENERATION OF DUST FROM CONSTRUCTION SUITES AND SUBSEQUENT BLOWING AND DEPOSITION INTO LOCAL SURFACE WATER RESOURCES.

PLANNING CRITERIA
THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST:

MULCHES - SEE STANDARD OF STABILIZATION WITH MULCHES ONLY, PG 5-1

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

SPRAY ON ADHESIVE - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

DUST CONTROL MATERIALS

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

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

SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

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

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

SLOPE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

STANDARD FOR STABILIZATION WITH MULCH ONLY

DEFINITION
STABILIZING EXPOSED SOILS WITH NON-VEGETATIVE MATERIALS EXPOSED FOR PERIODS LONGER THAN 14 DAYS.

PURPOSE
TO PROTECT EXPOSED SOIL SURFACES FROM EROSION DAMAGE AND TO REDUCE OFFSITE ENVIRONMENTAL DAMAGE.

CONDITION WHERE PRACTICE APPLIES
THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON-SITE AND OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT. CONSULT WITH LOCAL MUNICIPAL ORDINANCES ON ANY RESTRICTION.

WATER QUALITY ENHANCEMENT
PROVIDES TEMPORARY MECHANICAL PROTECTION AGAINST WIND OR RAINFALL INDUCED SOIL EROSION UNTIL PERMANENT VEGETATIVE COVER MAY BE ESTABLISHED.

WHERE APPLICABLE
THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO EROSION, WHERE THE SEASON AND OTHER CONDITIONS MAY NOT BE SUITABLE FOR GROWING AN EROSION-RESISTANT COVER OR WHERE STABILIZATION IS NEEDED FOR A SHORT PERIOD UNTIL MORE SUITABLE PROTECTION CAN BE APPLIED.

METHODS AND MATERIALS

1. SITE PREPARATION

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

2. PROTECTIVE MATERIALS

A. UNROTTED SMALL-GRAIN STRAW, AT 2.0 TO 2.5 TONS PER ACRE, IS SPREAD UNIFORMLY AT 90 TO 115 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT. THE APPROVED RATES ABOVE HAVE BEEN MET WHEN THE MULCH COVERS THE GROUND COMPLETELY UPON VISUAL INSPECTION, I.E. THE SOIL CANNOT BE SEEN BELOW THE MULCH.

C. SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE USED UNDER SUITABLE CONDITIONS AND IN QUANTITIES AS RECOMMENDED BY THE MANUFACTURER.

D. WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,500 POUNDS PER ACRE (OR ACCORDING TO THE MANUFACTURER'S REQUIREMENTS) MAY BE APPLIED BY A HYDROSEEDER.

E. MULCH NETTING, SUCH AS PAPER JUTE, EXCELSIOR, COTTON, OR PLASTIC, MAY BE USED.

F. WOODCHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED. WOODCHIPS WILL NOT BE USED ON AREAS WHERE FLOWING WATER COULD WASH THEM INTO AN INLET AND PLUG IT.

G. GRAVEL, CRUSHED STONE, OR SLAG AT THE RATE OF 9 CUBIC YARDS PER 1,000 SQ. FT. APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 3 INCHES MAY BE USED. SIZE 2 OR 3 (ASTM C-33) IS RECOMMENDED.

3. MULCH ANCHORING - SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA AND STEEPNESS OF SLOPES.

A. PEG AND TWINE - DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.

B. MULCH NETTINGS - STAPLE PAPER, COTTON, OR PLASTIC NETTINGS OVER MULCH. USE DEGRADABLE NETTING IN AREAS TO BE MOWED. NETTING IS USUALLY AVAILABLE IN ROLLS 4 FEET WIDE AND UP TO 300 FEET LONG.

C. CRIMPER MULCH ANCHORING COULTER TOOL - A TRACTOR-DRAWN IMPLEMENT ESPECIALLY DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE. THIS PRACTICE AFFORDS MAXIMUM EROSION CONTROL, BUT ITS USE IS LIMITED TO THOSE SLOPES UPON WHICH THE TRACTOR CAN OPERATE SAFELY. SOIL PENETRATION SHOULD BE ABOUT 3 TO 4 INCHES. ON SLOPING LAND, THE OPERATION SHOULD BE ON THE CONTOUR.

D. LIQUID MULCH-BINDERS

1. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE.

2. USE ONE OF THE FOLLOWING:

a. ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS THAT MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANE NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTO-TOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. VEGETABLE BASED GELS SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER.

b. SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

CONSTRUCTION SEQUENCE

EXACT TIMING FOR DEVELOPMENT OF THIS PROJECT IS NOT KNOWN AT THIS TIME. HOWEVER, IT IS ANTICIPATED THAT CONSTRUCTION WILL COMMENCE IN THE SPRING OF 2024 AND WILL PROCEED IMMEDIATELY AND CONTINUOUSLY ONCE THE REQUIRED APPROVALS ARE SECURED. ITEMS AND DURATIONS OF CONSTRUCTION WILL OCCUR APPROXIMATELY AS FOLLOWS: PHASE DURATION

1. TEMPORARY SOIL EROSION FACILITIES	CONTINUOUSLY
2. ROUGH CLEARING AND GRADING	1 WEEK
3. TEMPORARY SEEDING	1 DAY
4. POOL INSTALLATION	2 WEEKS
5. UTILITY INSTALLATION	1 WEEK
6. DRAINAGE CONSTRUCTION	2 WEEKS
7. CURB CONSTRUCTION	1 WEEK
8. CONSTRUCTION OF BUILDINGS	9 MONTHS
9. MAINTENANCE OF TEMPORARY EROSION CONRTOL MEASURES	CONTINUOUSLY
10. PRELIMINARY INSTALLATION OF LANDSCAPE	1 WEEK
11. FINAL CONSTRUCTION/STABILIZATION OF SITE	1 WEEK

*TEMPORARY SEEDING SHALL ALSO BE PERFORMED WHEN NECESSARY IN ACCORDANCE W ITH NOTE NO. 1 OF THE SOIL EROSION AND SEDIMENT CONTROL NOTES.

NOTES:
CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION. THE PROPERTY OWNERS SHALL ASSUME THIS RESPONSIBILITY AFTER CONSTRUCTION IS COMPLETED AND CERTIFICATES OF OCCUPANCY ARE ISSUED.

THE SOIL EROSION INSPECTOR MAY REQUIRE ADDITIONAL SOIL EROSION MEASURES TO BE INSTALLED, AS DIRECTED BY THE DISTRICT INSPECTOR.

THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE ROADWAYS CLEAN AT ALL TIMES. ANY SEDIMENT SPILLED OR TRACKED ON THE ROADWAY WILL BE CLEANED UP IMMEDIATELY, OR AT MINIMUM, BY THE END OF EACH WORK DAY.

DUST GENERATION SHALL BE CONTROLLED ON A CONSTANT BASIS BY WETTING THE SURFACE AND/OR APPLICATION OF CALCIUM CHLORIDE.

STEEP SLOPES SHALL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR SUITABLE EQUAL. (SEE ANCHORING NOTES & NOTE NO. 6 OF SOIL EROSION & SEDIMENT CONTROL NOTES.)

ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON INDIVIDUAL SITES SHALL APPLY TO ANY SUBSEQUENT OWNERS.

STANDARD FOR TOPSOILING

1. MATERIALS
   A. TOPSOIL SHOULD BE FRIABLE1, LOAMY2, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES, AND CONTAIN NO TOXIC SUBSTANCE OR ADVERSE CHEMICAL OR PHYSICAL CONDITION THAT MAY BE HARMFUL TO PLANT GROWTH. SOLUBLE SALTS SHOULD NOT BE EXCESSIVE (CONDUCTIVITY LESS THAN 0.5 MILLIMHOS PER CENTIMETER. MORE THAN 0.5 MILLIMHOS MAY DESICCATE SEEDLINGS AND ADVERSELY IMPACT GROWTH). IMPORTED TOPSOIL SHALL HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.75 PERCENT. ORGANIC MATTER CONTENT MAY BE RAISED BY ADDITIVES.
   B. TOPSOIL SUBSTITUTE IS A SOIL MATERIAL WHICH MAY HAVE BEEN AMENDED WITH SAND, SILT, CLAY, ORGANIC MATTER, FERTILIZER OR LIME AND HAS THE APPEARANCE OF TOPSOIL. TOPSOIL SUBSTITUTES MAY BE UTILIZED ON SITES WITH INSUFFICIENT TOPSOIL FOR ESTABLISHING PERMANENT VEGETATION. ALL TOPSOIL SUBSTITUTE MATERIALS SHALL MEET THE REQUIREMENTS OF TOPSOIL NOTED ABOVE. SOIL TESTS SHALL BE PERFORMED TO DETERMINE THE COMPONENTS OF SAND, SILT, CLAY, ORGANIC MATTER, SOLUBLE SALTS AND PH LEVEL.
2. STRIPPING AND STOCKPILING
   A. FIELD EXPLORATION SHOULD BE MADE TO DETERMINE WHETHER QUANTITY AND OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.
   B. STRIPPING SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA.
   C. WHERE FEASIBLE, LIME MAY BE APPLIED BEFORE STRIPPING AT A RATE DETERMINED BY SOIL TESTS TO BRING THE SOIL PH TO APPROXIMATELY 6.5
   D. A 4-6 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL.
   E. STOCKPILES OF TOPSOIL SHOULD BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.
   F. STOCKPILES SHOULD BE VEGETATED IN ACCORDANCE WITH STANDARDS PREVIOUSLY DESCRIBED HEREIN; SEE STANDARDS FOR PERMANENT (PG. 4-1) OR TEMPORARY (PG.7-1) VEGETATIVE COVER FOR SOIL STABILIZATION. WEEDS SHOULD NOT BE ALLOWED TO GROW ON STOCKPILES.
3. SITE PREPARATION
   A. GRADE AT THE ONSET OF THE OPTIMAL SEEDING PERIOD SO AS TO MINIMIZE THE DURATION AND AREA OF EXPOSURE OF DISTURBED SOIL TO EROSION. IMMEDIATELY PROCEED TO ESTABLISH VEGETATIVE COVER IN ACCORDANCE WITH THE SPECIFIED SEED MIXTURE. TIME IS OF THE ESSENCE
   B. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE. SEE THE STANDARD FOR LAND GRADING, PG. 19-1.
   C. AS GUIDANCE FOR IDEAL CONDITIONS, SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT. LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL TO A PH OF APPROXIMATELY 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
   D. PRIOR TO TOPSOILING, THE SUBSOIL SHALL BE IN COMPLIANCE WITH THE STANDARD FOR LAND GRADING, PG. 19-1.
   E. EMPLOY NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENTATION BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.
4. APPLYING TOPSOIL
   A. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE; I.E., LESS THAN FIELD CAPACITY (SEE GLOSSARY).
   B. A UNIFORM APPLICATION TO AN AVERAGE DEPTH OF 5.0 INCHES, MINIMUM OF 4 INCHES, FIRMED IN PLACE IS REQUIRED. ALTERNATIVE DEPTHS MAY BE CONSIDERED WHERE SPECIAL REGULATORY AND/OR INDUSTRY DESIGN STANDARDS ARE APPROPRIATE SUCH AS ON GOLF COURSES, SPORTS FIELDS, LANDFILL CAPPING, ETC.. SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR MORE, IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOIL (PG. 1-1).
   C. PURSUANT TO THE REQUIREMENTS IN SECTION 7 OF THE STANDARD FOR PERMANENT VEGETATIVE STABILIZATION, THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT PERMANENT VEGETATIVE COVER BECOMES ESTABLISHED ON AT LEAST 80% OF THE SOILS TO BE STABILIZED WITH VEGETATION. FAILURE TO ACHIEVE THE MINIMUM COVERAGE MAY REQUIRE ADDITIONAL WORK TO BE PERFORMED BY THE CONTRACTOR TO INCLUDE SOME OR ALL OF THE FOLLOWING: SUPPLEMENTAL SEEDING, RE-APPLICATION OF LIME AND FERTILIZERS, AND/OR THE ADDITION OF ORGANIC MATTER (I.E. COMPOST) AS A TOP DRESSING. SUCH ADDITIONAL MEASURES SHALL BE BASED ON SOIL TESTS SUCH AS THOSE OFFERED BY RUTGERS COOPERATIVE EXTENSION SERVICE OR OTHER APPROVED LABORATORY FACILITIES QUALIFIED TO TEST SOIL SAMPLES FOR AGRONOMIC PROPERTIES.

HIGH-ACID PRODUCING SOILS- METHODS AND MATERIALS

1. LIMIT THE EXCAVATION AREA AND EXPOSURE TIME WHEN HIGH ACID-PRODUCING SOILS ARE ENCOUNTERED.
2. TOPSOIL STRIPPED FROM THE SITE SHALL BE STORED SEPARATELY FROM TEMPORARILY STOCKPILED HIGH ACID-PRODUCING SOILS.
3. STOCKPILES OF HIGH ACID-PRODUCING SOIL SHOULD BE LOCATED ON LEVEL LAND TO MINIMIZE ITS MOVEMENT, ESPECIALLY WHEN THIS MATERIAL HAS A HIGH CLAY CONTENT.
4. TEMPORARILY STOCKPILED HIGH ACID-PRODUCING SOIL MATERIAL TO BE STORED MORE THAN 48 HOURS SHOULD BE COVERED WITH PROPERLY ANCHORED, HEAVY GRADE SHEETS OF POLYETHYLENE WHERE POSSIBLE. IF NOT POSSIBLE, STOCKPILES SHALL BE COVERED WITH A MINIMUM OF 3 TO 6 INCHES OF WOOD CHIPS TO MINIMIZE EROSION OF THE STOCKPILE. SILT FENCE SHALL BE INSTALLED AT THE TOE OF THE SLOPE TO CONTAIN MOVEMENT OF THE STOCKPILED MATERIAL. TOPSOIL SHALL NOT BE APPLIED TO THE STOCKPILES TO PREVENT TOPSOIL CONTAMINATION WITH HIGH ACID-PRODUCING SOIL.
5. HIGH ACID-PRODUCING SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE (INCLUDING BORROW FROM CUTS OR DREDGED SEDIMENT) SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS PER ACRE (OR 450 POUNDS PER 1,000 SQUARE FEET OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12 INCHES OF SETTLED SOIL WITH A PH OF 5.0 OR MORE EXCEPT AS FOLLOWS:
   a) AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED SHALL BE COVERED WITH A MINIMUM OF 24 INCHES OF SOIL WITH A PH OR 5 OR MORE.
   b) DISPOSAL AREAS SHALL NOT BE LOCATED WITHIN 24 INCHES OF ANY SURFACE OF A SLOPE OR BANK, SUCH AS BERMS, STREAM BANKS, DITCHES, AND OTHERS, TO PREVENT POTENTIAL LATERAL LEACHING DAMAGES.
6. EQUIPMENT USED FOR MOVEMENT OF HIGH ACID-PRODUCING SOILS SHOULD BE CLEANED AT THE END OF EACH DAY TO PREVENT SPREADING OF HIGH ACID-PRODUCING SOIL MATERIALS TO OTHER PARTS OF THE SITE, INTO STREAMS OR STORMWATER CONVEYANCES, AND TO PROTECT MACHINERY FROM ACCELERATED RUSTING.
7. NON-VEGETATIVE EROSION CONTROL PRACTICES (STONE TRACKING PADS, STRATEGICALLY PLACED LIMESTONE CHECK DAM, SEDIMENT BARRIER, WOOD CHIPS) SHOULD BE INSTALLED TO LIMIT THE MOVEMENT OF HIGH ACID-PRODUCING SOILS FROM, AROUND, OR OFF THE SITE.
8. FOLLOWING BURIAL OR REMOVAL OF HIGH ACID-PRODUCING SOIL, TOPSOILING AND SEEDING OF THE SITE (SEE TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION, PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION, AND TOPSOILING), MONITORING MUST CONTINUE FOR A MINIMUM OF 6 MONTHS TO ENSURE THERE IS ADEQUATE STABILIZATION AND THAT NO HIGH ACID-PRODUCING SOIL PROBLEMS EMERGE. IF PROBLEMS STILL EXIST, THE AFFECTED AREA MUST BE TREATED AS INDICATED ABOVE TO CORRECT THE PROBLEM.

BASIN COMPACTION NOTES

1. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" INCHES WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).
2. INSPECT SITE JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILED AND FIRMED IN ACCORDANCE WITH ABOVE.
3. IMMEDIATELY PRIOR TO TOPSOILING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" INCHES WHERE THERE HAS BEEN SOIL COMPACTION. THIS WILL HELP INSURE A GOOD BOND BETWEEN THE TOPSOIL AND SUBSOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).
4. SOIL COMPACTION RESULTING FROM LAND GRADING ACTIVITIES CAN IMPACT THE INFILTRATION RATE OF THE SOIL. RESTORATION OF COMPACTED SOILS THROUGH DEEP TILLAGE (6" TO 12") AND THE ADDITION OF ORGANIC MATTER MAY BE REQUIRED IN PLANNED PERVIOUS AREAS TO ENHANCE THE INFILTRATION RATE OF THE DISTURBED SOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLE, IRRIGATION SYSTEMS, ETC.).
5. TO PREVENT COMPACTION OF THE SUBSOIL WHICH WILL REDUCE ITS INFILTRATION CAPACITY, BASINS SHOULD BE EXCAVATED WITH LIGHT EARTH MOVING EQUIPMENT, PREFERABLY WITH TRACKS OR OVER-SIZED TIRES RATHER THAN THE NORMAL RUBBER TIRES,. ONCE THE FINAL CONSTRUCTION PHASE IS REACHED, THE FLOOR OF THE BASIN SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND SMOOTHED OVER WITH A LEVELING DRAG OR EQUIVALENT GRADING EQUIPMENT.
6. FOR BASINS, ANNUAL TILLING OPERATIONS MAINTAIN INFILTRATION CAPACITY. THESE TILLED AREAS SHOULD BE RE-VEGETATED IMMEDIATELY TO PREVENT EROSION. DEEP TILLING CAN BE USED TO BREAKUP CLOGGED SURFACE LAYERS FOLLOWED BY REGARDING AND LEVELING. SAND OR ORGANIC MATTER CAN BE TILLED INTO THE BASIN FLOOR TO PROMOTE A RESTORED INFILTRATION CAPACITY. SEDIMENT REMOVAL PROCEDURES SHOULD NOT BE UNDERTAKEN UNTIL THE BASIN IS THOROUGHLY DRY. THE TOP LAYER SHOULD BE REMOVED BY LIGHT EQUIPMENT TO PREVENT COMPACTION. THE REMAINING SOIL CAN BE RETILED AND DISTURBED VEGETATION REPLANTED.

PROJECT INFORMATION

PROJECT NAME:
PROPOSED MIXED-USE BUILDING

PROJECT LOCATION:
BLOCK 8.17, LOT 15
12010 LONG BEACH BOULEVARD.
LONG BEACH TOWNSHIP,
OCEAN COUNTY, NJ

OWNER:
LSH HOLDINGS LLC
28 RODEO DRIVE
WEST CREEK, NJ 08092

APPLICANT:
LSH HOLDINGS LLC
28 RODEO DRIVE
WEST CREEK, NJ 08092

APPLICANT'S PROFESSIONALS

ARCHITECT:
HAND LINE ARCHITECT
128 BARTLETT AVENUE,
WEST CREEK, NJ 08092

SURVEYOR:
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414 LACEY ROAD
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ATTORNEY:
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InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
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DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
0	06/12/25	INITIAL RELEASE

SCALE: N/A	DESIGNED BY: JMW
DATE: 06/12/25	DRAWN BY: M-S
JOB #: 25-2462-02	CHECKED BY: DDC

☒ NOT FOR CONSTRUCTION
APPROVED BY:
☐ FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:
PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:
SOIL EROSION & SEDIMENT CONTROL NOTES

SHEET NO:
C801

File: X:\Jobs\2462 - JS Pro Construction\25-2462-02 - 12010 Long Beach Boulevard_Long Beach Township, NJ\25246202CAD\dwg\C800 SESC.dwg, ---> C801 SESC Notes
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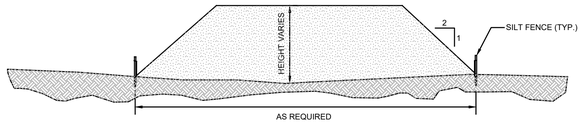
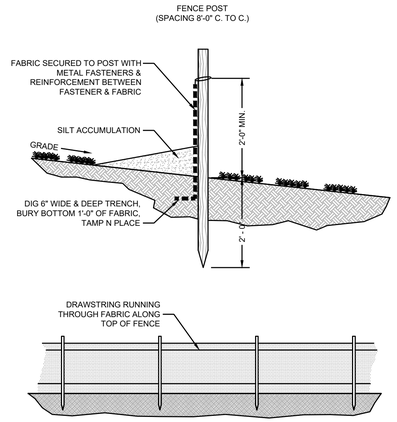


SECTION THROUGH SOIL STOCKPILE (TYP.)

NTS

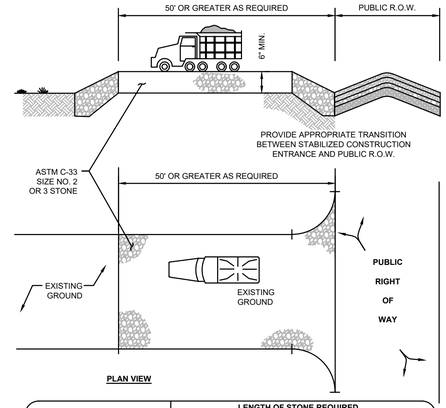


SILT FENCE DETAIL

NTS

SEDIMENT BARRIER MAINTENANCE

1. SEDIMENT SHALL BE REMOVED FROM THE UPSTREAM FACE OF THE BARRIER WHEN IT HAS REACHED A DEPTH OF 1/2 THE BARRIER HEIGHT.
2. REPAIR OR REPLACE BARRIER (FABRIC, POSTS, BALES ETC.) WHEN DAMAGED.
3. BARRIERS SHALL BE INSPECTED DAILY FOR SIGNS OF DETERIORATION AND SEDIMENT REMOVAL.



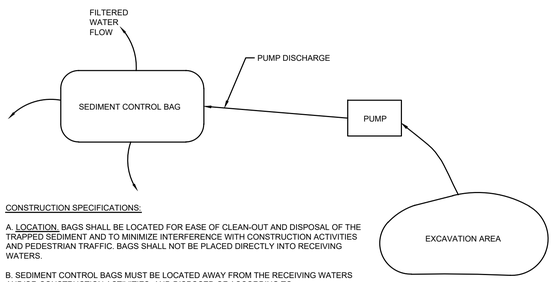
PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COURSE GRAINED SOILS	FINE GRAINED SOILS
0 TO 2%	50 FT	100 FT
2 TO 5%	100 FT	200 FT
> 5%	ENTIRE SURFACE STABILIZED WITH FABC HOT MIX ASPHALT BASE COURSE, MIX 1-2 [1]	

1. AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY.

STABILIZED CONSTRUCTION ENTRANCE

NTS

NOTE: INDIVIDUAL LOT ACCESS POINTS MAY REQUIRE STABILIZATION. THE THICKNESS SHOWN IS FOR STONE CONSTRUCTION ENTRANCE ONLY.



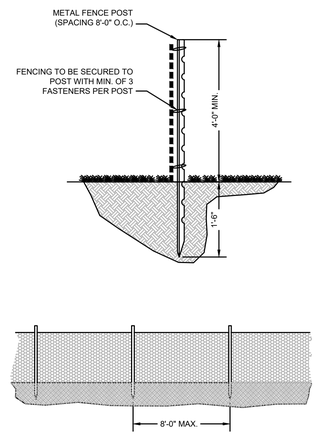
CONSTRUCTION SPECIFICATIONS:

A. LOCATION. BAGS SHALL BE LOCATED FOR EASE OF CLEAN-OUT AND DISPOSAL OF THE TRAPPED SEDIMENT AND TO MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES AND PEDESTRIAN TRAFFIC. BAGS SHALL NOT BE PLACED DIRECTLY INTO RECEIVING WATERS.

B. SEDIMENT CONTROL BAGS MUST BE LOCATED AWAY FROM THE RECEIVING WATERS AND/OR CONSTRUCTION ACTIVITIES, AND DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS. BAGS MAY NOT BE REUSED.

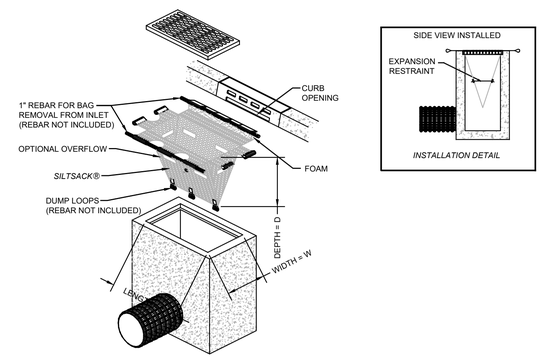
SEDIMENT CONTROL BAG FOR DEWATERING

NOT TO SCALE



TREE PROTECTION FENCING

NTS



INLET PROTECTION DETAIL

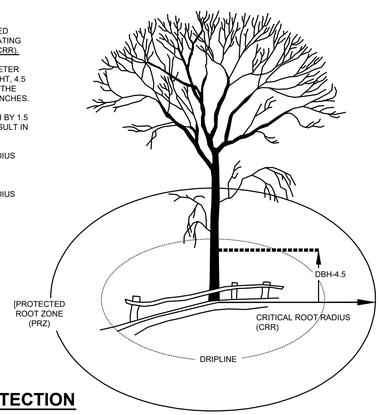
NTS

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

1. MEASURE THE DBH (DIAMETER OF TREE AT BREAST HEIGHT, 4.5 FEET ABOVE GROUND ON THE UPHILL SIDE OF TREE) IN INCHES.
2. MULTIPLY MEASURED DBH BY 1.5 OR 1.0. EXPRESS THE RESULT IN FEET.

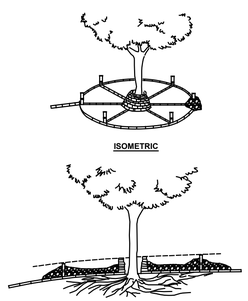
DBH X 1.5: CRITICAL ROOT RADIUS FOR OLDER, UNHEALTHY, OR SENSITIVE SPECIES.

DBH X 1.0: CRITICAL ROOT RADIUS FOR YOUNGER, HEALTHY OR TOLERANT SPECIES.



TREE ROOT PROTECTION

NTS

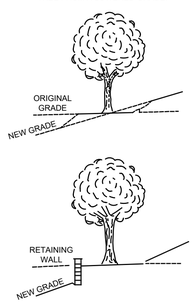


TREE PROTECTION - TILE AND GRAVEL WILL ALLOW AIR CIRCULATION TO ROOT ZONE UNDER A FILL.

TREE PROTECTION (FILL AREAS)

NTS

A RETAINING WALL PROTECTS A TREE FROM A LOWERED GRADE.



TREE PROTECTION (CUT AREAS)

NTS

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C802

File: X:\Jobs\2462 - JS Pro Construction\25-2462-02 - 12010 Long Beach Boulevard_Long Beach Township, NJ\2024\02\CAD\dwg\C800_SESC.dwg, ---> C802 SESC Details
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