

PRELIMINARY AND FINAL SITE PLAN
FOR

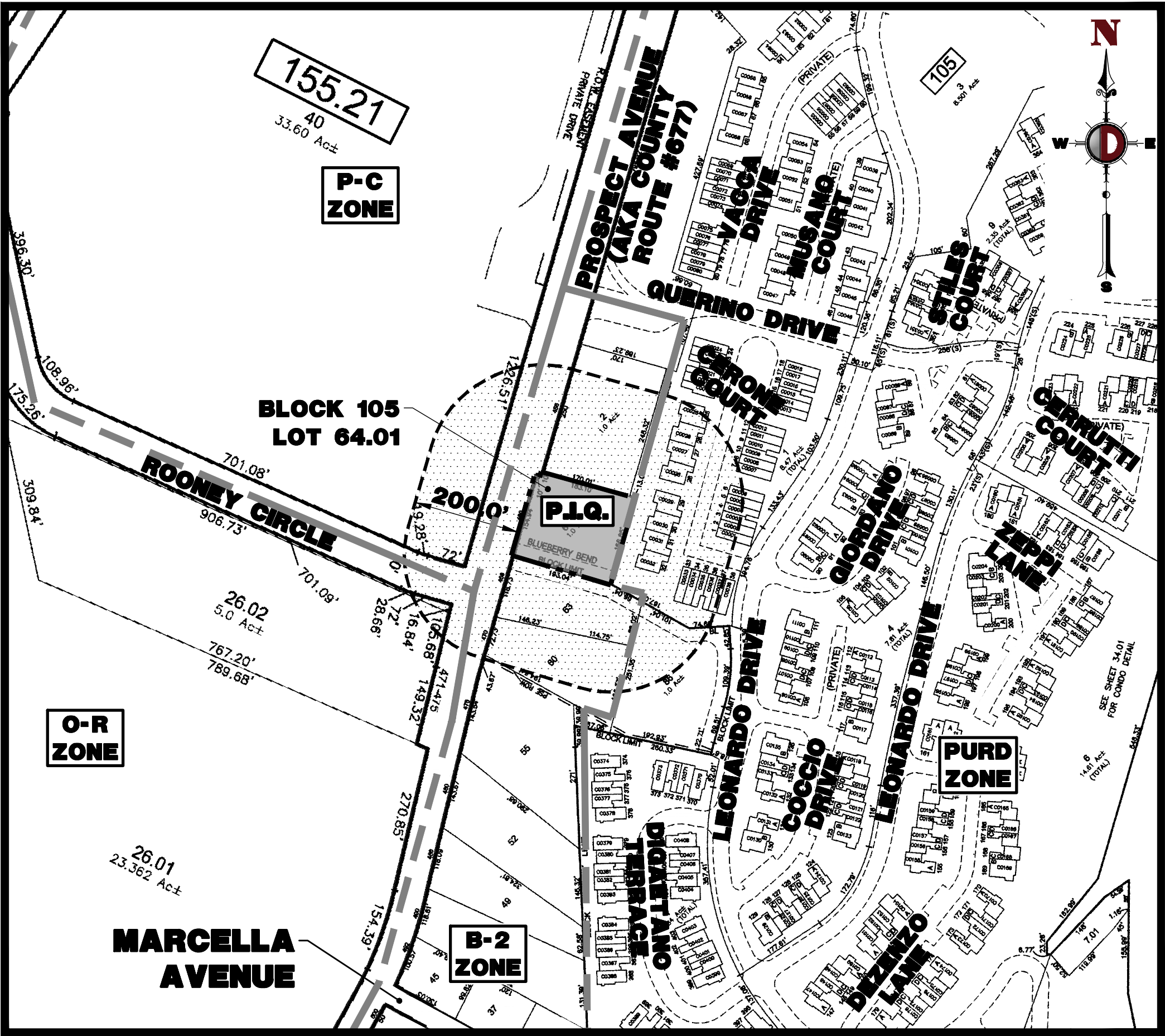


PROPOSED AUTOMOTIVE SERVICE AND RETAIL CENTER
BLOCK 105, LOT 64.01; TAX MAP SHEET #34 - LATEST REV. DATED 06-2011
460 PROSPECT AVENUE
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

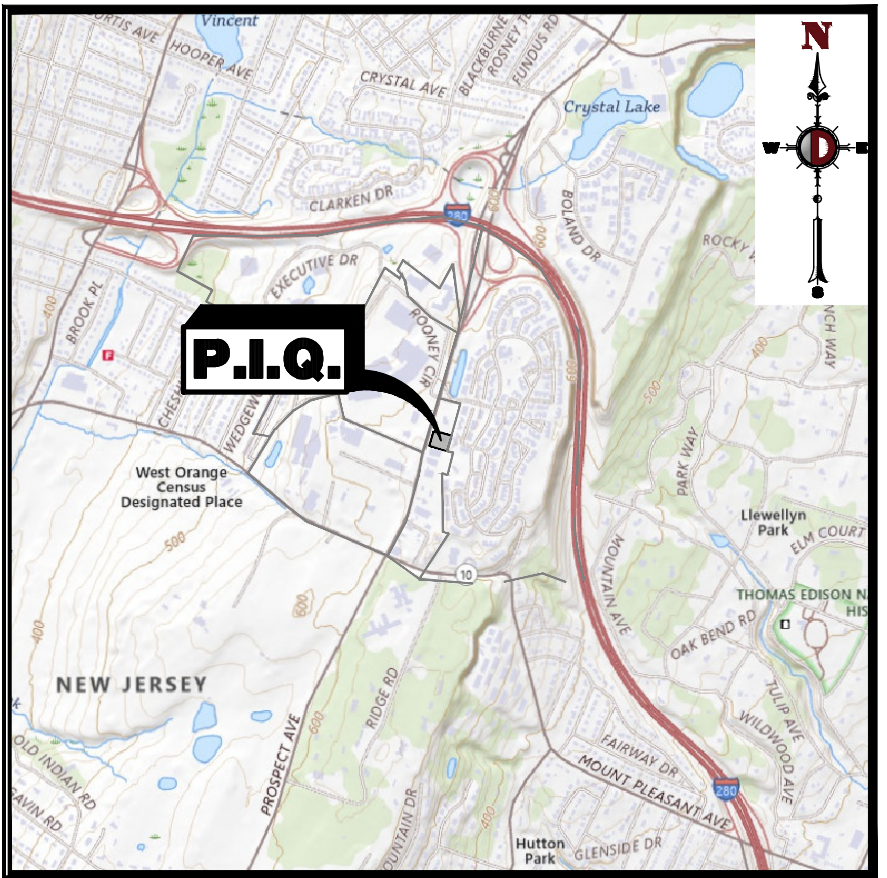
200' PROPERTY OWNERS LIST

Table with 6 columns: PROPERTY OWNER, BLOCK, LOT, PROPERTY OWNER, BLOCK, LOT. Lists neighboring property owners and their details.

- LIST OF REQUIRED REGULATORY APPROVALS
- WEST ORANGE TOWNSHIP ZONING BOARD - PENDING
- ESSEX COUNTY PLANNING BOARD - PENDING
- HUDSON ESSEX PASSAGE SOIL CONSERVATION DISTRICT - PENDING
- JOINT MEETING OF ESSEX AND UNION COUNTIES - NOT SUBMITTED
- NEW JERSEY AMERICAN WATER - NOT SUBMITTED
- PUBLIC SERVICE ELECTRIC & GAS CO. - NOT SUBMITTED



AREA MAP
1" = 200'



KEY MAP
1" = 2000'

DRAWING INDEX table listing drawing titles and sheet numbers (e.g., COVER SHEET 1 of 19, AERIAL MAP 2 of 19).

ZONING BOARD APPROVAL

APPROVED BY THE ZONING BOARD OF TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

Table for Zoning Board Approval signatures: CHAIRMAN, SECRETARY, BOARD ENGINEER.

PREPARED BY
DYNAMIC ENGINEERING CONSULTANTS, P.C.
5 GREENTREE CENTRE, SUITE 406
MARLTON, NJ 08053
WWW.DYNAMICCEC.COM

THIS PLAN SET IS FOR PERMITTING PURPOSES ONLY AND MAY NOT BE USED FOR CONSTRUCTION

DYNAMIC ENGINEERING logo and contact information: 5 Greentree Centre, Suite 406, Marlton, NJ 08053.

TITLE: COVER SHEET

PROJECT: MAVIS TIRE SUPPLY, LLC
PROPOSED AUTOMOTIVE SERVICE AND RETAIL CENTER
BLOCK 105, LOT 64.01
460 PROSPECT AVENUE
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

Professional Engineer signatures: RODMAN R. RITCHIE and ROBERT P. FREUD, with their respective licenses and the 811 logo.



GENERAL NOTES

1. THIS PLAN HAS BEEN PREPARED BASED ON REFERENCES INCLUDING:

ALTA/NSPS LAND TITLE SURVEY
PREPARED BY: DYNAMIC SURVEY, LLC
50 PARK PLACE, 8TH FLOOR, SUITE 901
NEWARK, NEW JERSEY 07102
DATED: 12/04/2024, LAST REVISED: 12/17/2024
SURVEYOR FILE NO. 1956-24-04170

2. APPLICANT: MAVIS TIRE SUPPLY, LLC
WHITE PLAINS, NY 10603
3. OWNER: 460 PROSPECT STREET, LOT
1625 STATE ROUTE, NO 0950
BLOOM PLAINS, NJ 07005
4. PARCEL DATA: BLOCK 105, LOT 64-0
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

5. ZONE: ZONE B-2 (GENERAL BUSINESS DISTRICT)

6. EXISTING USE: OFFICE (PERMITTED USE) (§25-7.1)

7. PROPOSED USE: MOTOR VEHICLE SERVICE STATION (NON-SPECIFIED USE)
RETAIL (PERMITTED USE) (§25-7.1)

8. SCHEDULE OF ZONING REQUIREMENTS (§25-7.1)

ZONE REQUIREMENT	ZONE B-2	EXISTING	PROPOSED
MINIMUM LOT AREA	10,000 SF (0.23 Ac)	32,118 SF (0.74 Ac)	32,118 SF (0.74 Ac)
MINIMUM LOT WIDTH	40 FT	169 FT	169 FT
MINIMUM LOT FRONTAGE	40 FT	165 FT	165 FT
MINIMUM LOT DEPTH	N/A	193 FT	193 FT
MINIMUM FRONT YARD SETBACK (PROSPECT AVENUE)	30 FT	91.8 FT	43.0 FT
MINIMUM REAR YARD SETBACK	30 FT	41.8 FT	30.0 FT
MINIMUM SIDE YARD SETBACK	10 FT	42.8 FT	19.6 FT
MINIMUM COMBINED SIDE YARD SETBACK	20 FT	112.3 FT	112.8 FT
MINIMUM DRIVE AISLE SIDE YARD SETBACK	5 FT	0 FT (E)	0 FT (E)
MAXIMUM BUILDING HEIGHT	2.5 STORIES, > 35 FT	2 STORIES	1 STORY
MAXIMUM BUILDING COVERAGE (BY BUILDINGS & CANOPIES)	40%	10.4% (3,338 SF)	20.6% (6,618 SF)
MAXIMUM IMPERVIOUS COVERAGE	60%	59.9% (19,241 SF)	63.3% (20,335 SF)(V)

N/S: NO STANDARD N/A: NOT APPLICABLE (E) EXISTING NON-CONFORMANCE (V) VARIANCE

9. PARKING:
A. ALL OFF-STREET PARKING AREAS SHALL BE SURFACED WITH AN ASPHALT, BITUMINOUS, OR CONCRETE PAVED PAVEMENT WHICH SHALL BE GRADED AND DRAINED TO DISPOSE OF ALL SURFACE WATER AS PROVIDED BY THE TOWNSHIP ENGINEER. THERE SHALL BE A FIVE-FOOT-WIDE SIDEWALK AT LEAST FIVE INCHES ABOVE THE PARKING AREA LEVEL BETWEEN ANY BUILDING AND A PARKING AREA OR DRIVE USED BY THE PUBLIC (§25-12.1(A)) (COMPLIES)
B. THE ENTIRE PERIMETER OF ALL PARKING AREAS AND THE EDGES OF ALL ENTRANCE AND EXIT DRIVE SHALL BE ENCLOSED WITH A CONCRETE OR GRANITE BLOCK CURB AT LEAST SIX INCHES ABOVE THE PAVING SURFACE. CURBING SHALL NOT BE LESS THAN FIVE FEET FROM ANY FENCE OR SCREENING NOR LESS THAN FIVE FEET FROM ANY STRUCTURE. WHERE REQUIRED, CONCRETE WHEEL STOPS SHALL BE PROVIDED. (§25-12.1(B)) (COMPLIES)
C. ANY PARKING AREA SHALL BE SCREENED ON ANY SIDE, MESH DIVISIONS OR FENCES SITUATED IN ANY RESIDENTIAL DISTRICT BY A FENCE, WALL, BERM, EVERGREEN OR HEDGE MAINTAINED IN GOOD CONDITION AS REQUIRED. THE FENCES AS REQUIRED BY THIS SUBSECTION MAY BE WAIVED BY THE PLANNING BOARD OR THE ZONING BOARD IF IN THE BOARD'S JUDGMENT, BECAUSE OF THE TOPOGRAPHY OR OTHER EXTRAORDINARY OR EXCEPTIONAL CONDITIONS, THE FENCE IS NOT NECESSARY TO PROTECT THE ADJOINING PROPERTY. (§25-12.1) (COMPLIES)
D. ALL PARKING AREAS SHALL BE DESIGNED WITH SERVICE AISLES TO MEET THE FOLLOWING STANDARDS: (§25-12.1(H)) (COMPLIES)
1. 90' WIDE PARKING, TWENTY-FOUR-FOOT AISLE, MINIMUM WAY, (§25-12.1(H.5)) (COMPLIES)
2. ALL DRIVEWAYS FOR TWO-WAY TRAFFIC SHALL BE A MINIMUM OF 24 FEET WIDE AND A 10' CURE SHALL A DRIVEWAY BE LESS THAN 14 FEET WIDE. (§25-12.1(H.6)) (COMPLIES)
E. EACH ENTRANCE OR EXIT FROM SUCH PARKING AREA SHALL BE AT LEAST 50 FEET FROM ANY RESIDENTIAL DISTRICT. (§25-12.1(I)) (COMPLIES)
F. NO PARKING IN THE SIDE YARD SHALL BE CLOSER THAN 1/2 THE SIDE YARD REQUIREMENTS TO THE SIDE PROPERTY LINE OR 10 FEET, WHICHEVER IS GREATER. IN THE O-8 AND B DISTRICTS, OFF-STREET PARKING MAY BE PLACED IN THE SIDE OR REAR YARD ONLY. (§25-12.1(I.1)) (COMPLIES)
G. STANDARD SIDE PARKING SPACES SHALL HAVE MINIMUM DIMENSIONS OF NINE FEET BY 18 FEET MEASURED PERPENDICULAR TO THE AXIS OF THE LENGTH WITH ADEQUATE PROVISION FOR INCHES AND SPACES. COMPACT SIDE SPACES SHALL NOT BE LESS THAN EIGHT FEET BY 15 FEET. IF APPROVED BY THE PLANNING BOARD OR BOARD OF ADJUSTMENT. (§25-12.1(P)) (COMPLIES)
H. AN ACCESS DRIVE TO AN OFF-STREET PARKING AREA OR TRUCK-LOADING SPACE MAY BE LOCATED WITHIN A REQUIRED SIDE YARD, BUT SHALL NOT BE LOCATED WITHIN FIVE FEET OF A SIDE LOT LINE. (§25-12.4(A.2)) (COMPLIES)
I. PARKING OR STORAGE OF DISABLED, UNLICENSED, OR OBVIOUSLY WRECKED VEHICLES FOR A PERIOD OF MORE THAN 48 HOURS IS EXPRESSLY PROHIBITED IN ANY ZONING DISTRICT EXCEPT ON PROPERTY SPECIFICALLY DESIGNATED FOR THAT PURPOSE. (§25-12.4(A.3)) (COMPLIES)
J. NO TRAILER, SEMI-TRAILER, POLE TRAILER, ROAD TRAILER, TRUCK TRAILER OR VEHICLE WITH DUAL REAR WHEELS SHALL BE PARKED OR STORED ON PROPERTY IN ANY DISTRICT, EXCEPT AS HEREAFTER PROVIDED. (§25-12.4(A.6)) (COMPLIES)
K. NOTHING HEREIN SHALL BE DEEMED TO PROHIBIT THE PARKING OR STORING OF A TRAILER, SEMI-TRAILER, POLE TRAILER, ROAD TRAILER, TRUCK TRAILER OR VEHICLE WITH DUAL REAR WHEELS ON PROPERTY IN ANY DISTRICT WHILE IT IS BEING USED IN THE TRANSPORTATION OF BUSINESS WITH THE OWNER OR OCCUPANT OF THE PROPERTY. IN NO EVENT SHALL THE TIME PERIOD AUTHORIZED BY THIS SUBSECTION EXCEED FOUR HOURS. (§25-12.4(A.6.B)) (COMPLIES)
L. THE PARKING REQUIREMENT FOR A BUILDING OR DEVELOPMENT WITH A MIX OF NON-RESIDENTIAL USES SHALL BE THE TOTAL OF THE REQUIREMENTS OF THE COMPONENT USES, COMBINED SEPARATELY IN ACCORDANCE WITH THE PROVISIONS OF THIS SUBSECTION (§25-12.4(M))
M. MOTOR VEHICLE OFF-STREET PARKING REQUIREMENTS:

MOTOR VEHICLE SERVICE USE = 5 SPACES REQUIRED
(1,142 SF OF RETAIL)(1 PARKING SPACE/200 SF OF RETAIL) = 6 SPACES REQUIRED
(7 SERVICE BAYS)(2 PARKING SPACES/SERVICE BAY) = 14 SPACES REQUIRED
= 25 TOTAL SPACES REQUIRED

HANDICAPPED PARKING SPACE REQUIREMENT:

PER N.J.A.C. 5:23-7.9(C) OF THE BARRIER FREE SUBCODE THE REQUIREMENTS FOR ACCESSIBLE PARKING IS AS FOLLOWS:

26-50 (TOTAL PARKING SPACES PROVIDED) = 2 ACCESSIBLE SPACES REQUIRED
TOTAL PROVIDED: = 2 PROPOSED SPACES (COMPLIES)

MINIMUM ELECTRIC VEHICLE CHARGING STATION (EVSE) REQUIREMENTS PER WEST ORANGE TOWNSHIP ORDINANCE (§25-12.6):
MINIMUM MAKE-READY SPACES REQUIRED = 0 EVSE SPACE REQUIRED
= 0 EVSE SPACE PROPOSED (COMPLIES)

PROPOSED PARKING SUMMARY:
PROPOSED SPACES = 22 PROPOSED SPACES (VARIANCE)
(INCLUDING 2 ADA SPACES)
(NOT INCLUDING 7 SERVICE BAYS)

10. BUFFER REQUIREMENTS
A. ALONG ANY SIDE OR REAR PROPERTY LINE WHICH IS ALSO THE BOUNDARY LINE BETWEEN A NON-RESIDENTIAL DISTRICT AND A RESIDENTIAL DISTRICT OR IS CONTIGUOUS TO A RESIDENTIAL USE IN A RESIDENTIAL ZONE, A BUFFER STRIP SHALL BE PLANTED AND MAINTAINED IN PERPETUITY WITH TREES AND SUBROBBERY OF SUCH SIZES AND SPACINGS AS TO ADEQUATELY SCREEN THE BUILDINGS FROM SUCH ADJUTING RESIDENTIAL DISTRICT OR USE IN A RESIDENTIAL ZONE. THE REQUIRED BUFFER WIDTH SHALL BE 50 FEET IN ALL NON-RESIDENTIAL ZONES. (§25-11.3(A)) (SEE REQUIREMENT BELOW)
B. THE ABOVE REQUIREMENT (§25-11.3(A)) SHALL BE REDUCED FOR LOTS THAT ARE LESS THAN 40,000 SQUARE FEET IN AREA AND/OR LESS THAN 300 FEET IN WIDTH. ON SUCH SMALLER LOTS, THE REQUIRED BUFFER WIDTH SHALL BE 10% OF LOT WIDTH OR DEPTH, BUT NOT LESS THAN 20 FEET. (§25-11.3(B)) (COMPLIES)
C. ON WOODED SITES, EXISTING TREES SHOULD BE SAVED WITHIN BUFFER STRIPS TO THE MAXIMUM EXTENT POSSIBLE. WHERE EXISTING TREES WOULD BE REMOVED IN BUFFER STRIPS, REPLACEMENT TREES AND LANDSCAPING SHALL BE PROVIDED TO FORM A CONTINUOUS NATURAL LANDSCAPE EDGE. BERING, EVERGREEN TREES AND/OR FENCING SHALL BE PROVIDED ALONG THE INTERIOR EDGE OF THE BUFFER (I.E., CLOSEST TO NEW DEVELOPMENT ON THE SITE) WHEN ADEQUATE NATURAL BUFFERING CANNOT BE PROVIDED. (§25-11.3(C)) (COMPLIES)
11. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS BY ALL OF THE PERMITTING AUTHORITIES.
12. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY.
13. THE SOLIS REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER CONSTRUCTION MANAGER OF ANY DISCREPANCY BETWEEN SOLIS REPORT & PLANS.
14. SITE CLEARING SHALL INCLUDE THE LOCATION AND REMOVAL OF ALL UNDERGROUND TANKS, PIPES, VALVES, ETC.
15. THE PROPERTY SURVEY SHALL BE CONSIDERED A PART OF THESE PLANS.
16. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
17. SOLID WASTE TO BE DISPOSED OF BY CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
18. ALL EXCAVATED UNSUITABLE MATERIAL MUST BE TRANSPORTED TO AN APPROVED DISPOSAL LOCATION.
19. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION AND SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
20. ALL CONTRACTORS MUST CARRY STATUTORY WORKERS COMPENSATION, EMPLOYERS LIABILITY INSURANCE AND APPROPRIATE LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (CGL). ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME DYNAMIC ENGINEERING CONSULTANTS, P.C., ITS SUBCONSULTANTS AS ADDITIONAL INSURED AND TO PROVIDE CONTRACTOR LIABILITY COVERAGE SUFFICIENT TO INSURE THE HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED BY THE CONTRACTOR. ALL CONTRACTORS MUST FURNISH DYNAMIC ENGINEERING CONSULTANTS, P.C., WITH CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED COVERAGE FOR CONSTRUCTION SAFETY PRECAUTIONS. ALL OF WHICH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. DYNAMIC ENGINEERING REVIEW SHALL BE COORDINATED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE THAT DYNAMIC ENGINEERING CONSULTANTS, P.C. HAS REVIEWED THE ENTIRE ASSEMBLY, WHICH THE ITEM IS A COMPONENT. DYNAMIC ENGINEERING CONSULTANTS, P.C. SHALL NOT BE RESPONSIBLE FOR ANY OPERATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO THE ATTENTION OF DYNAMIC ENGINEERING CONSULTANTS, P.C. IN WRITING BY THE CONTRACTOR. DYNAMIC ENGINEERING CONSULTANTS, P.C. SHALL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
21. NEITHER THE PROFESSIONAL ACTIVITIES OF DYNAMIC ENGINEERING CONSULTANTS, P.C., NOR THE PRESENCE OF DYNAMIC ENGINEERING CONSULTANTS, P.C. OR ITS EMPLOYEES AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERVISING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. DYNAMIC ENGINEERING CONSULTANTS, P.C. AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOBSITE SAFETY. DYNAMIC ENGINEERING CONSULTANTS, P.C. SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND SHALL BE MADE ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE.
22. DYNAMIC ENGINEERING CONSULTANTS, P.C. SHALL REVIEW AND APPROVE OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN AND CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERVISING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. DYNAMIC ENGINEERING CONSULTANTS, P.C. SHALL NOT BE RESPONSIBLE FOR ANY OPERATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO THE ATTENTION OF DYNAMIC ENGINEERING CONSULTANTS, P.C. IN WRITING BY THE CONTRACTOR. DYNAMIC ENGINEERING CONSULTANTS, P.C. SHALL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
23. IN AN EFFORT TO RESOLVE ANY CONFLICTS THAT ARISE DURING THE DESIGN AND CONSTRUCTION OF THE PROJECT OR FOLLOWING THE COMPLETION OF THE PROJECT, DYNAMIC ENGINEERING CONSULTANTS, P.C. AND THE CONTRACTOR MUST AGREE THAT ALL DISPUTES BETWEEN THEM ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE PROJECT SHALL BE SUBMITTED TO NONBINDING MEDIATION UNLESS THE PARTIES MUTUALLY AGREE OTHERWISE.
24. THE CONTRACTOR MUST INCLUDE A MEDIATION PROVISION IN ALL AGREEMENTS WITH INDEPENDENT SUBCONTRACTORS AND CONSULTANTS OBTAINED FOR THE PROJECT AND TO RESOLVE ALL INTERMEDIATE CONTRACTORS AND CONSULTANTS ALSO TO INCLUDE A SIMILAR MEDIATION PROVISION IN ALL AGREEMENTS WITH THEIR SUBCONTRACTORS, SUBCONSULTANTS, SUPPLIERS AND FABRICATORS, THEREBY PROVIDING FOR MEDIATION AS THE PRIMARY METHOD FOR DISPUTE RESOLUTION BETWEEN THE PARTIES TO ALL THOSE AGREEMENTS.

25. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED THEREON, WITHOUT FIRST OBTAINING PRIOR WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER, IT SHALL BE RESPONSIBLE FOR THE COSTS OF CORRECTING ANY SUCH DEVIATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND IT SHALL INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ALL SUCH COSTS TO CORRECT ANY SUCH WORK AND FROM ALL SUCH FINES AND PENALTIES, COMPENSATION AND PUNITIVE DAMAGES AND COSTS OF ANY NATURE RESULTING THEREFROM.
26. ALL TRAFFIC SIGNS AND STRIPING SHALL FOLLOW THE REQUIREMENTS SPECIFIED IN THE MANUAL ON "UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
27. THE BUILDING SETBACK DIMENSIONS ILLUSTRATED AND LISTED ON THE SITE PLAN DRAWINGS ARE MEASURED FROM THE OUTSIDE SURFACE OF BUILDING WALLS. THESE SETBACK DIMENSIONS DO NOT ACCOUNT FOR ROOF OVERHANGS, ORNAMENTAL ELEMENTS, SIGNAGE OR OTHER EXTERIOR EXTENSIONS UNLESS SPECIFICALLY NOTED.
28. CONTRACTOR ACKNOWLEDGES HE HAS READ AND UNDERSTOOD THE DESIGN PHASE SOIL PERMEABILITY AND GROUNDWATER TEST RESULTS IN THE STORMWATER MANAGEMENT REPORT AND THAT THE CONTRACTORS RESPONSIBILITIES INCLUDE NECESSARY PROVISIONS TO ACHIEVE THE DESIGN PERMEABILITY IN THE FIELD.
29. CONTRACTOR TO BE ADVISED THAT THE ENGINEER WAS NOT PROVIDED WITH FINAL FLOOR PLAN DRAWINGS FOR THE BUILDING AT THE TIME OF SITE PLAN DESIGN. AS A RESULT, ENTRANCE DOOR LOCATIONS AS SHOWN ON THE ARCHITECTURAL PLANS PROX TO THE BUILDING ARE NOT NECESSARILY THE FINAL LOCATIONS. THE CONTRACTOR SHALL CONSTRUCT THE HANDICAP ACCESSIBLE PARKING SPACES AND THE ASSOCIATED RAMP AND ACCESSIBLE ROUTE TO COMPLY WITH N.J.A.C. 5:23-7.1 AND THE HANDICAP PARKING SPACES MUST BE LOCATED AS THE NEAREST SPACES TO THE ENTRANCE. CONTRACTOR TO NOTIFY OWNER AND ENGINEER IMMEDIATELY OF ANY DISCREPANCY PRIOR TO CONSTRUCTION.

DEMOLITION NOTES

1. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN STRICT ADHERENCE TO ALL FEDERAL, STATE AND LOCAL REGULATIONS.
2. PROCEED WITH DEMOLITION IN A SYSTEMATIC MANNER, FROM THE TOP OF THE STRUCTURE(S) TO THE GROUND.
3. COMPLETE DEMOLITION WORK ABOVE EACH FLOOR OR TIER BEFORE DISTURBING ANY OF THE SUPPORTING MEMBERS OF THE LOWER LEVELS.
4. DEMOLISH CONCRETE AND MASONRY IN SMALL SECTIONS.
5. REMOVE STRUCTURAL FRAMING MEMBERS AND LOWER THEM TO THE GROUND.
6. BREAK UP CONCRETE SLABS-ON-GRADE, UNLESS OTHERWISE DIRECTED BY OWNER.
7. LOCATE DEMOLITION EQUIPMENT THROUGHOUT THE STRUCTURE AND REMOVE MATERIALS SO AS TO NOT IMPOSE EXCESSIVE LOADS ON SUPPORTING WALLS, FLOORS, OR FRAMING.
8. PROVIDE INTERIOR AND EXTERIOR SHORING, BRACING AND SUPPORTS TO PREVENT MOVEMENT, SETTLEMENT OR COLLAPSE OF STRUCTURES TO BE DEMOLISHED (AND ADJACENT FACILITIES, IF APPLICABLE).
9. DEMOLISH AND REMOVE ALL FOUNDATION WALLS, FOOTINGS AND OTHER MATERIALS WITHIN THE AREA OF THE DESIGNATED FUTURE BUILDING. ALL OTHER FOUNDATION SYSTEMS, INCLUDING BASEMENTS, SHALL BE DEMOLISHED TO A DEPTH OF NOT LESS THAN ONE FOOT BELOW PROPOSED PAVEMENT OR BREAK BASEMENT FLOOR SLABS. SHALL ALL OPEN UTILITY LINES WITH CONCRETE CONTRACTOR TO REVIEW STRUCTURE PRIOR TO DEMOLITION TO DETERMINE IF BASEMENT, CRAWL SPACE OR ANY SUB-STRUCTURE EXISTS. ANY SUB-STRUCTURE, INCLUDING BASEMENTS SHALL BE REMOVED IN ITS ENTIRETY OR AS DIRECTED BY OWNER.
10. ERECT AND MAINTAIN COVERED PASSAGEWAYS IN ORDER TO PROVIDE SAFE PASSAGE FOR PERSONS AROUND THE AREA OF DEMOLITION. CONDUCT ALL DEMOLITION OPERATIONS IN A MANNER THAT WILL PREVENT DAMAGE AND PERSONAL INJURY TO STRUCTURES, ADJACENT BUILDINGS AND ALL PERSONS. PLACE THE SAFETY AND PROTECTION OF THE SURROUNDING COMMUNITY AND PROPERTY AT THE HIGHEST PRIORITY.
11. REFRAIN FROM USING ANY EXPLOSIVES WITHOUT PRIOR WRITTEN CONSENT OF OWNER AND APPLICABLE GOVERNMENTAL AUTHORITIES.
12. CONDUCT DEMOLITION SERVICES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS AND OTHER ADJACENT FACILITIES. DO NOT CLOSURE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT FACILITIES WITHOUT PRIOR WRITTEN PERMISSION OF OWNER AND ANY APPLICABLE GOVERNMENTAL AUTHORITIES. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS, IF REQUIRED BY APPLICABLE GOVERNMENTAL REGULATIONS.
13. USE WATERING, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS, AS NECESSARY TO LIMIT THE AMOUNT OF DUST AND DIRT RISING AND SCATTERING IN THE AIR. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. RETURN ALL ADJACENT AREAS TO THE CONDITIONS EXISTING PRIOR TO THE START OF WORK.
14. ACCOMPLISH AND PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE UNAUTHORIZED ENTRY OF PERSONS AT ANY TIME.
15. COMPLETELY FILL BELOW GRADE AREAS AND VOIDS RESULTING FROM THE DEMOLITION OF STRUCTURES AND FOUNDATIONS WITH SOIL MATERIALS IN ACCORDANCE WITH THE GEOTECHNICAL REPORT, CONSISTING OF STONES, GRAVEL AND SAND, FREE FROM DEBRIS, TRASH, FROZEN MATERIALS, ROOTS AND OTHER ORGANIC MATERIAL. STONES USED SHALL NOT BE LARGER THAN 6 INCHES IN DIAMETER. MATERIAL FROM DEMOLITION MAY NOT BE USED AS FILL. PRIOR TO PLACEMENT OF FILL MATERIALS, UNDERAKE ALL NECESSARY ACTION IN ORDER TO ENSURE THAT ARE TO BE FILLED ARE FREE OF STANDING WATER, TRASH, FROZEN MATERIAL, TRASH, DEBRIS. PLACE FILL MATERIALS IN HORIZONTAL LAYERS NOT EXCEEDING 6 INCHES IN LOOSE DEPTH AND COMPACT EACH LAYER AT PLACEMENT TO 95% OPTIMUM DENSITY. GRADE THE SURFACE TO MEET ADJACENT CONTOURS AND TO PROVIDE SURFACE DRAINAGE.
16. REMOVE FROM THE DESIGNATED SITE, AT THE EARLIEST POSSIBLE TIME, ALL DEBRIS, RUBBISH, SALVAGEABLE ITEMS, HAZARDOUS AND COMBUSTIBLE SERVICES. REMOVED MATERIALS MAY NOT BE STORED, SOLD OR BURNED ON THE SITE. REMOVAL OF HAZARDOUS AND COMBUSTIBLE MATERIALS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PROCEDURES AS AUTHORIZED BY THE FIRE DEPARTMENT OR OTHER APPROPRIATE REGULATORY AGENCIES AND AUTHORITIES.
17. DISCONNECT, SHUT OFF AND SEAL IN CONCRETE ALL UTILITIES SERVING THE STRUCTURE(S) TO BE DEMOLISHED BEFORE THE COMMENCEMENT OF THE DESIGNATED DEMOLITION. MARK FOR FUTURE INSTALLATION ALL UTILITY DRAINAGE AND SANITARY LINES AND PROTECT ALL ACTIVE LINES. CLEARLY IDENTIFY BEFORE THE COMMENCEMENT OF DEMOLITION SERVICES THE REQUIRED INTERRUPTION OF ACTIVE SYSTEMS THAT MAY AFFECT OTHER PARTIES, AND NOTIFY ALL APPLICABLE UTILITY COMPANIES TO ENSURE THE CONTINUATION OF SERVICE.
18. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THAT ALL PROCEDURES ARE TO BE IN ACCORDANCE WITH STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS NECESSARY.
19. CONTEMPERATION OF ACTIONS NECESSARY TO ADDRESS ENVIRONMENTAL CONSIDERATIONS IS EXCLUDED FROM THIS PLAN SET. SUCH CONSIDERATIONS MAY INCLUDE, BUT ARE NOT LIMITED TO, THE CLOSURE/HANDLING/TRANSPORTATION/DISPOSAL OF UNDERGROUND STORAGE TANKS, CONTAMINATED MEDIA, UNIVERSAL WASTE, POTENTIALLY HAZARDOUS MATERIALS, ETC. PRIOR TO INITIATION OF DEMOLITION, THE CONTRACTOR SHALL SPECIFICALLY CONSULT WITH PROJECT OWNERSHIP TO CONFIRM IF ENVIRONMENTAL CONCERNS EXIST AND IF CONSULTATION WITH THE ENVIRONMENTAL PROFESSIONAL RESPONSIBLE FOR THIS PROJECT IS NECESSARY OR APPROPRIATE.
20. GROUNDWATER MONITORING WELLS AND POTABLE WELLS (IF PRESENT) SHALL BE PROTECTED DURING DEMOLITION. IF PROTECTION IS NOT POSSIBLE, THE ENVIRONMENTAL PROFESSIONAL RESPONSIBLE FOR THIS PROJECT SHALL BE CONSULTED. ANY WELLS THAT CANNOT BE MAINTAINED SHALL BE DECOMMISSIONED BY A LICENSED WELL DRILLER AND COORDINATED SPECIFICALLY WITH THE RESPONSIBLE ENVIRONMENTAL PROFESSIONAL.

NOTES

1. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR SHALL BE REQUIRED TO CALL THE BOARD OF PUBLIC UTILITIES ONE CALL DAMAGE PROTECTION SYSTEM OR UTILITY MARK OUT IN ADVANCE OF ANY EXCAVATION.
2. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING SITE IMPROVEMENTS AND UTILITIES. ALL DISCREPANCIES SHALL BE IDENTIFIED TO THE ENGINEER IN WRITING.
3. ALL EXISTING UTILITIES TO BE ABANDONED SHALL BE DISCONNECTED AND CAPPED AT THE MAIN FOR WATER, AT THE CLEAN-OUT FOR SEWER AND THE SHUT-OFF VALVE OR MAIN FOR GAS IN ACCORDANCE WITH MUNICIPAL AND LOCAL UTILITY REQUIREMENTS.
4. ALL EXISTING DEBRIS SHALL BE REMOVED BY CONTRACTOR IN ACCORDANCE WITH MUNICIPAL AND LOCAL UTILITY COMPANY REQUIREMENTS.

GRADING NOTES

1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOLIS REPORT REFERENCED IN THIS PLAN SET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND RESHAPING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE SOLIS REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM TEST 1557. AT THE TIME OF CONSTRUCTION, THE CONTRACTOR SHALL NOT EXCEED 2% ABOVE NOR 3% BELOW OPTIMUM CONTRACTOR SHALL SUBMIT A COMPACTOR REPORT PREPARED BY A QUALIFIED SOILS ENGINEER, REGISTERED WITHIN THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT THE FILLED AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECS AND THE RECOMMENDATIONS SET FORTH IN THE SOLIS REPORT.
2. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 0.75% MIN. SLOPE AGAINST ALL ISLAND GUTTERS/CURBS AND 1.0% ON ALL CONCRETE SURFACES, AND 1.5% MIN. ON ASPHALT UNLESS OTHERWISE NOTED. ANY FIELD CORRECTIONS OR PROJECT COSTS MAY BE INCURRED BY THE CONTRACTOR IF THE ENGINEER IN WRITING IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITH DESIGN DISCREPANCIES IS DONE SO AT THE CONTRACTOR'S OWN RISK.
3. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MIN. OF 0.75% GUTTER GRADE ALONG CURB FACE RECEIVING SURFACE RUNOFF. ENGINEER TO APPROVE FINAL CURBING OUT SHEETS PRIOR TO INSTALLATION.
4. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED TO 95% OPTIMUM DENSITY (AS DETERMINED) BY MODIFIED PROCTOR METHOD.
5. REFER TO SITE PLAN FOR ADDITIONAL NOTES.
6. IN CASE OF DISCREPANCIES BETWEEN PLANS, THE SITE PLAN WILL SUPERCEDE IN ALL CASES. CONTRACTOR MUST NOTIFY ENGINEER OF ANY CONFLICT IMMEDIATELY.
7. MAXIMUM CROSS SLOPE OF 1:48 (2.08%) ON ALL SIDEWALKS.
8. CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE OWNER'S GEOTECHNICAL ENGINEER PRIOR TO ONSET OF CONSTRUCTION TO SUBMIT AND CONFIRM THE CONTRACTOR'S PROPOSED MEANS AND MATERIALS AND TO SCHEDULE INSPECTIONS FOR BOTTOM OF BASIN, REMOVAL OF UNSUITABLE SOIL, FILL PLACEMENT, AND FINAL BASIN PERMEABILITY TESTING.
9. THE CONTRACTOR IS RESPONSIBLE FOR AS-BUILT PLANS AND GRADE CONTROL UNLESS DEFINED OTHERWISE ELSEWHERE IN THE CONTRACT DOCUMENTS.

ADA NOTES

1. ALL SLOPES INDICATED ARE ACTUAL. CONTRACTOR TO CONSTRUCT IMPROVEMENTS IN COMPLIANCE WITH THE LATEST ADA GUIDELINES AND BUILDING CODE REQUIREMENTS. AT THE TIME OF PLAN DESIGN, THESE REQUIREMENTS INCLUDE BUT ARE NOT LIMITED TO:
A. SIDEWALKS/ ACCESSIBLE ROUTES:
- WIDTH: 36" MIN. EXCLUSIVE OF THE WIDTH OF ANY CURB
- PASSING SPACE: MIN. 60" x 60" AT INTERVALS OF 200' MAX IF ACCESSIBLE ROUTE WIDTH IS LESS THAN 60"
- RUNNING SLOPE: 1:20 (5%) MAX.
- CROSS SLOPE: 1:48 (2.08%) MAX., 1.0% MIN.
- INTERSECTION SLOPE: 1:48 (2.08%) MAX. IN ALL DIRECTIONS
- CHANGE IN LEVELS: 1/4" MAX. HEIGHT OR 1/2" MAX. HEIGHT WITH BEVELED EDGE BEVELED EDGE SLOPE OF 1:2 (50%) MAX.
- CAPS: 1/2" MAX. WIDTH ELONGATED OPENINGS SHALL BE PLACED SO LONG DIMENSION IS PERPENDICULAR TO PATH OF TRAVEL.
B. CURB RAMP:
- SLOPE: 1:12 (8.33%) MAX.
- SIDE FARE SLOPE: 1:10 (10%) MAX. OR 1:12 (8.33%) MAX. IN ALTERATIONS WHERE TOP LANDING IS UNAVAILABLE (WHERE PEDS CROSS RAMP)
- BOTTOM LANDING: 48" MIN. LENGTH: WIDTH TO MATCH CURB RAMP; 1:48 MAX. (2.08%) IN ALL DIRECTIONS
- TOP LANDING: 36" MIN. LENGTH: WIDTH TO MATCH CURB RAMP; 1:48 MAX. (2.08%) CROSS SLOPE AND 1:20 (5%) RUNNING SLOPE WHEN ONLY CONNECTING ACCESSIBLE ROUTE RAMP PARALLEL TO THE RAMP RUN.
- COUNTER SLOPE: 1:20 (5%) MAX.
C. ACCESSIBLE PARKING STALLS:
- SPACE AND ACCESS AISLE SLOPE: 1:48 MAX. (2.08%) IN ALL DIRECTIONS ACROSS ACCESSIBLE PARKING STALLS AND STRIPED ACCESS AISLES
D. CROSSWALKS:
- RUNNING SLOPE: 1:20 (5%) MAX.
- CROSS SLOPE: 1:48 (2.08%) MAX.
- CHANGE IN LEVELS: 1/4" MAX. HEIGHT OR 1/2" MAX. HEIGHT WITH BEVELED EDGE, BEVELED EDGE SLOPE OF 1:2 (50%) MAX.
- CAPS: 1/2" MAX. WIDTH ELONGATED OPENINGS SHALL BE PLACED SO LONG DIMENSION IS PERPENDICULAR TO PATH OF TRAVEL.
E. RAMPS:
- SLOPE: 1:12 (8.33%) MAX.
- MAX. RISE: 30"
- MIN. CLEAR WIDTH: 36"
- MIN. LANDING CLEAR LENGTH: 60"
- MAX. CROSS SLOPE: 1:48 (2.08%)
F. CONTRACTOR SHALL CLARIFY ANY QUESTIONS CONCERNING CONSTRUCTION AND/OR GRADING IN ADA AREAS WITH THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.

DRAINAGE NOTES

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY UTILITY "ONE-CALL" NUMBER 72 HOURS PRIOR TO ANY EXCAVATION ON THIS SITE. CONTRACTOR SHALL ALSO NOTIFY LOCAL WATER & SEWER DEPARTMENTS TO MARK-OUT THEIR UTILITIES.
2. ROOF LEADER COLLECTION PIPING ARE CONCEPTUAL IN NATURE AND ARE NOT FOR CONSTRUCTION. ACTUAL ROOF LEADER COLLECTION PIPING IS TO BE COORDINATED W/ ARCHITECTURAL PLANS FOR EACH INDIVIDUAL BUILDING. ALL ROOF LEADER COLLECTION PIPING SHALL BE SCHEDULE 40 PVC UNLESS OTHERWISE DESIGNATED.
3. MANUFACTURED REINFORCED CONCRETE STORM PIPE TO CONFORM TO ASTM C-76, CLASS III, UNLESS OTHERWISE DESIGNATED. MANUFACTURED REINFORCED CONCRETE ELLIPTICAL STORM PIPE TO CONFORM TO ASTM C-507, CLASS HE-II, UNLESS OTHERWISE DESIGNATED. REINFORCED CONCRETE STORMWATER PIPE TO BE INSTALLED IN ACCORDANCE WITH AMERICAN CONCRETE PIPE ASSOCIATION INSTALLATION GUIDELINES AND MORTAR OR PREFORMED FLEXIBLE JOINT SEALANTS IN ACCORDANCE WITH ASTM C 990 TO BE UTILIZED TO PROVIDE A SILT-TIGHT JOINT. WHERE SPECIFICALLY INDICATED, REINFORCED CONCRETE STORM PIPE JOINTS SHALL BE WATERIGHT AND CONFORM TO ASTM C-443.
4. HOPE DRAINAGE PIPE SHALL HAVE A SMOOTH WALL INTERIOR WITH ANNUAL EXTERIOR CORRUGATIONS AND CONFORM TO ASTM F2306. SOLID PIPE SHALL HAVE GASKETED WATER-TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM F2306 AND ASTM D3212. PERFORATED PIPE SHALL HAVE GASKETED SILT-TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM F2306 AND ASTM F477. HOPE PIPE SHALL BE FROM A MANUFACTURER WHO IS AN EASTERN STATES CONSORTIUM (ESC) QUALIFIED MANUFACTURER OF HOPE PIPE AND INSTALLED IN ACCORDANCE WITH PIPE MANUFACTURER RECOMMENDATIONS.
5. HP DRAINAGE PIPE SHALL HAVE A SMOOTH WALL INTERIOR WITH ANNUAL EXTERIOR CORRUGATIONS AND CONFORM TO ASTM F2736 (12"-30" PIPE) AND ASTM F2881 (36"-60" PIPE). PIPE SHALL HAVE GASKETED WATER-TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM D3212 AND ASTM F477. FIELD WATERIGHTNESS PERFORMANCE VERIFICATION MAY BE ACCOMPLISHED IN ACCORDANCE WITH ASTM F2487. HP PIPE SHALL BE FROM A MANUFACTURER WHO IS AN EASTERN STATES CONSORTIUM (ESC) QUALIFIED MANUFACTURER OF HP STORM PIPE AND INSTALLED IN ACCORDANCE WITH PIPE MANUFACTURER RECOMMENDATIONS.
6. PIPE LENGTHS ON THIS PLAN HAVE BEEN MEASURED AS THE DISTANCE BETWEEN THE CENTER POINT OF THE 2 CONNECTED STRUCTURES. ACTUAL PHYSICAL PIPE LENGTH FOR INSTALLATION IS EXPECTED TO BE LESS AND SHOULD BE ACCOUNTED FOR BY THE CONTRACTOR ACCORDINGLY.

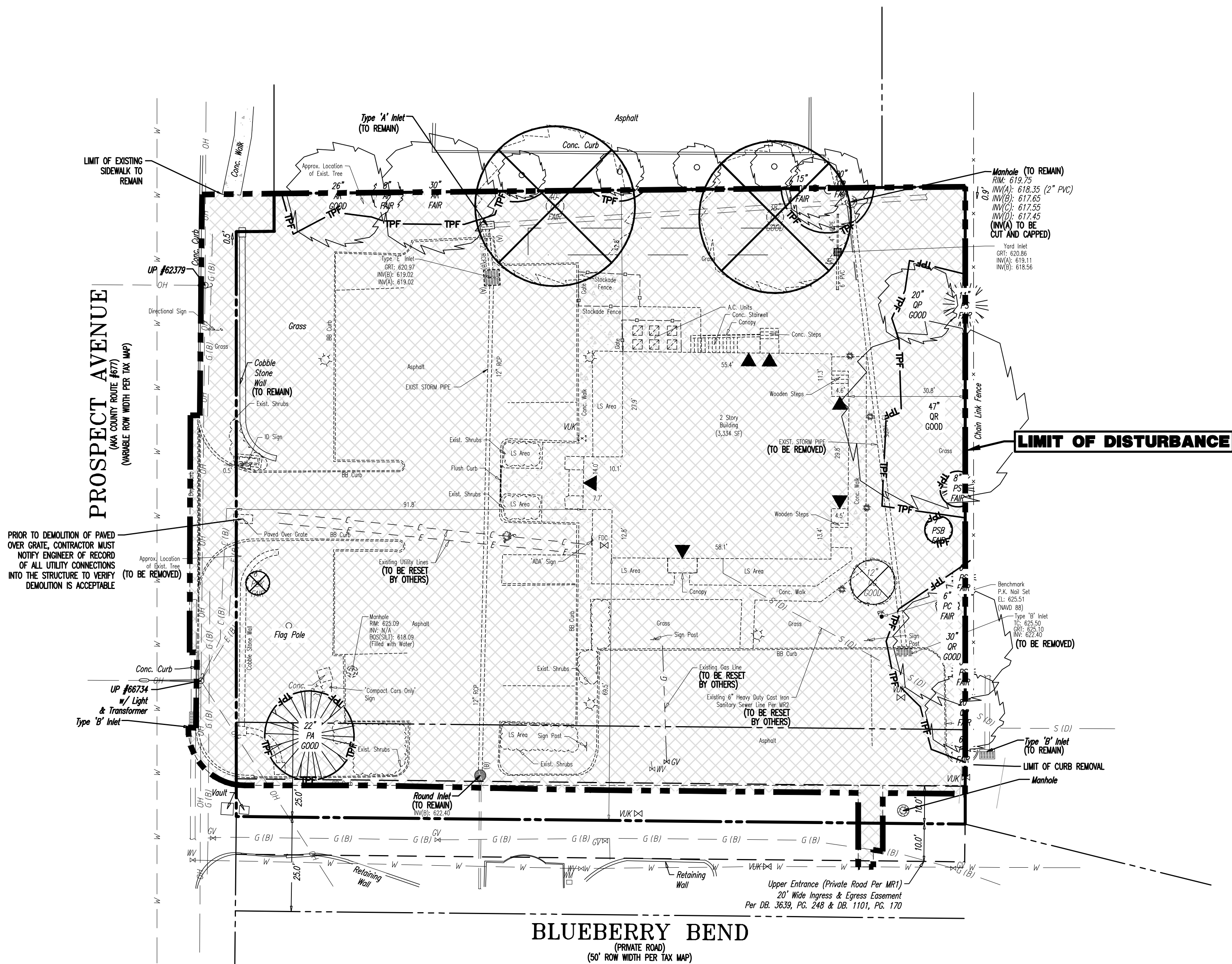
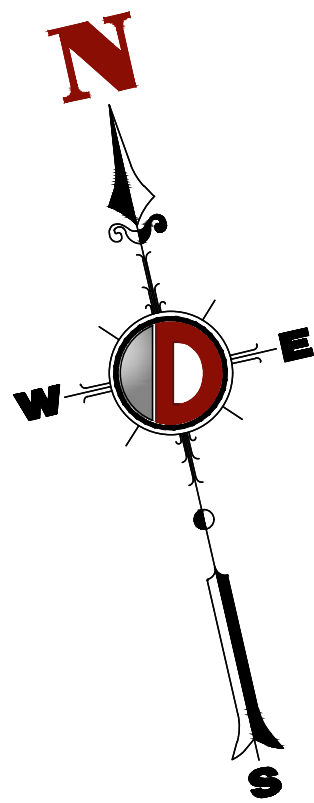
EXISTING UTILITY NOTES

EXISTING WATER SERVICE NOTE: CONTRACTOR TO LOCATE AND UTILIZE EXISTING WATER SERVICE CONNECTION IF FEASIBLE. OTHERWISE REMOVE EXISTING WATER SERVICE LINE AND CAP AT MAIN IN R.O.W. IN ACCORDANCE WITH THE LOCAL WATER COMPANY REQUIREMENTS. TERMINATION AT THE MAIN MUST BE APPROVED BY THE LOCAL WATER COMPANY PRIOR TO COMPLETION. IF THE EXISTING WATER SERVICE CAN NOT BE UTILIZED, THE NEW SERVICE IS TO BE COORDINATED AND VERIFIED FOR LOCATION WITH THE LOCAL WATER COMPANY. CONTRACTOR SHALL OBTAIN ALL REQUIRED STREET OPENING PERMITS FOR REMOVAL OF EXISTING SERVICE AND INSTALLATION OF NEW SERVICE.
EXISTING GAS SERVICE NOTE: CONTRACTOR TO LOCATE AND UTILIZE EXISTING GAS SERVICE CONNECTION IF FEASIBLE. OTHERWISE REMOVE EXISTING GAS SERVICE LINE AND CAP AT MAIN IN R.O.W. IN ACCORDANCE WITH THE LOCAL GAS COMPANY REQUIREMENTS. TERMINATION AT THE MAIN MUST BE APPROVED BY THE LOCAL GAS COMPANY PRIOR TO COMPLETION. IF NEW SERVICE IS TO BE COORDINATED AND VERIFIED FOR LOCATION WITH THE LOCAL GAS COMPANY, THE CONTRACTOR SHALL OBTAIN ALL REQUIRED STREET OPENING PERMITS FOR REMOVAL OF EXISTING SERVICE AND INSTALLATION OF NEW SERVICE.

SANITARY SEWER SERVICE NOTE: CONTRACTOR TO LOCATE AND UTILIZE EXISTING SEWER SERVICE CONNECTION IF FEASIBLE. OTHERWISE REMOVE EXISTING GAS SERVICE LINE AND CAP AT MAIN IN R.O.W. IN ACCORDANCE WITH THE LOCAL SEWER AUTHORITY REQUIREMENTS. TERMINATION AT THE MAIN MUST BE APPROVED BY THE LOCAL SEWER AUTHORITY PRIOR TO COMPLETION. IF EXISTING SEWER SERVICE CAN NOT BE UTILIZED THEN THE NEW SERVICE IS TO BE COORDINATED AND VERIFIED FOR LOCATION WITH THE LOCAL SEWER AUTHORITY. CONTRACTOR SHALL OBTAIN ALL REQUIRED STREET OPENING PERMITS FOR REMOVAL OF EXISTING SERVICE AND INSTALLATION OF NEW SERVICE.

UTILITY NOTES

1. LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY UTILITY "ONE-CALL" NUMBER 72 HOURS PRIOR TO ANY EXCAVATION ON THIS SITE. CONTRACTOR SHALL ALSO NOTIFY LOCAL WATER & SEWER DEPARTMENTS TO MARK-OUT THEIR UTILITIES.
3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME. SERVICE SIZES TO BE DETERMINED BY ARCHITECT.
4. WATER SERVICE MATERIALS SHALL BE SPECIFIED BY THE LOCAL UTILITY COMPANY. CONTRACTORS PRICE FOR WATER SERVICE SHALL INCLUDE ALL FEES AND APPURTENANCES REQUIRED BY THE UTILITY TO PROVIDE A COMPLETE WORKING SERVICE.
5. ALL WATER MAIN SHALL BE CEMENT-UNED, CLASS 52 DUCTILE IRON PIPE, UNLESS OTHERWISE DESIGNATED.
6. THE MINIMUM DIAMETER FOR DOMESTIC WATER SERVICES SHALL BE 1" INCH.
7. ALL SANITARY SEWER MAINS SHALL BE SEPARATED FROM WATER MAINS BY A DISTANCE OF AT LEAST 10 FEET HORIZONTALLY. IF SUCH SEPARATION IS NOT POSSIBLE, THE PIPES SHALL BE IN SEPARATE TRENCHES WITH THE SEWER MAIN AT LEAST 18 INCHES BELOW THE WATER MAIN OR SUCH OTHER SEPARATION AS APPROVED BY THE APPROVING AUTHORITY. WHERE APPROPRIATE CROSSING SEPARATION FROM A WATER MAIN IS NOT POSSIBLE, THE SEWER SHALL BE ENCASED IN CONCRETE, OR CONSTRUCTED OF DUCTILE IRON PIPE USING MECHANICAL OR SLP-ON JOINTS FOR A DISTANCE OF AT LEAST 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE WATER MAIN AS POSSIBLE. WHILE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWER SHALL BE PROVIDED. THE APPROVING AUTHORITY MAY REQUIRE ADDITIONAL STRUCTURAL SUPPORT FOR STORM SEWER CROSSING OVER SEWER LINES.
8. ALL SANITARY SEWER MAINS SHALL BE SDR-35 PVC PIPE MATERIAL UNLESS OTHERWISE DESIGNATED. SEWER PIPES INSTALLED WITH LESS THAN 3 FEET OF COVER, GREATER THAN 30 FEET OF COVER OR WITHIN 18 INCHES OF A WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE. ALL DUCTILE IRON SEWER PIPE SHALL BE CEMENT-UNED, CLASS 52 PIPE, FURNISHED WITH SEWER COAT, OR APPROVED ALIKE.
9. WHERE SANITARY SEWER LATERALS ARE GREATER THAN 10' DEEP AT CONNECTION TO THE SEWER MAIN, CONCRETE DEEP LATERAL CONNECTIONS ARE TO BE UTILIZED.
10. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILIZATION OF THE EXISTING SEWER MAIN, STRUCTURES AND APPURTENANCES DURING CONNECTION.
11. LOCATION & LAYOUT OF GAS, ELECTRIC & TELECOMMUNICATION UTILITY LINES AND SERVICES SHOWN ON THESE PLANS ARE SCHEMATIC IN NATURE. ACTUAL LOCATION & LAYOUT OF THESE UTILITIES & SERVICES ARE TO BE PER THE APPROPRIATE UTILITY PROVIDER.
12. ROOF LEADER COLLECTION PIPING ARE CONCEPTUAL IN NATURE AND ARE NOT FOR CONSTRUCTION. ACTUAL ROOF LEADER COLLECTION PIPING IS TO BE COORDINATED W/ ARCHITECTURAL PLANS FOR EACH INDIVIDUAL BUILDING. ALL ROOF LEADER COLLECTION PIPING SHALL BE SCHEDULE 40 PVC UNLESS OTHERWISE DESIGNATED.
13. ALL SEWER AND WATER FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATORY AUTHORITY'S RULES AND REGULATIONS.
14. ALL PROPOSED UTILITIES TO BE INSTALLED UNDERGROUND UNLESS OTHERWISE NOTED.
15. MANUFACTURED REINFORCED CONCRETE STORM PIPE TO CONFORM TO ASTM C-76, CLASS III, UNLESS OTHERWISE DESIGNATED. MANUFACTURED REINFORCED CONCRETE ELLIPTICAL STORM PIPE TO CONFORM TO ASTM C-507, CLASS HE-II, UNLESS OTHERWISE DESIGNATED. REINFORCED CONCRETE STORMWATER PIPE TO BE INSTALLED IN ACCORDANCE WITH AMERICAN CONCRETE PIPE ASSOCIATION INSTALLATION GUIDELINES AND MORTAR OR PREFORMED FLEXIBLE JOINT SEALANTS IN ACCORDANCE WITH ASTM C 990 TO BE UTILIZED TO PROVIDE A SILT-TIGHT JOINT. WHERE SPECIFICALLY INDICATED, REINFORCED CONCRETE STORM PIPE JOINTS SHALL BE WATERIGHT AND CONFORM TO ASTM C-443.
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17. HP DRAINAGE PIPE SHALL HAVE A SMOOTH WALL INTERIOR WITH ANNUAL EXTERIOR CORRUGATIONS AND CONFORM TO ASTM F2736 (12"-30" PIPE) AND ASTM F2881 (36"-60" PIPE). PIPE SHALL HAVE GASKETED WATER-TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM D3212 AND ASTM F477. FIELD WATERIGHTNESS PERFORMANCE VERIFICATION MAY BE ACCOMPLISHED IN ACCORDANCE WITH ASTM F2487. HP PIPE SHALL BE FROM A MANUFACTURER WHO IS AN EASTERN STATES CONSORTIUM (ESC) QUALIFIED MANUFACTURER OF HP STORM PIPE AND INSTALLED IN ACCORDANCE WITH PIPE MANUFACTURER RECOMMENDATIONS.
18. PIPE LENGTHS ON THIS PLAN HAVE BEEN MEASURED AS THE DISTANCE BETWEEN THE CENTER POINT OF THE 2 CONNECTED



TREE REPLACEMENT TABLE (TABLE A)					
DBH OF TREE	REQUIRED ACTION	AMOUNT OF TREE REPLACEMENT FUND	TOTAL TREES REMOVED	TOTAL TREES REQUIRED	TOTAL TREES PROPOSED
4"-6"	Replace with one 2.5" inch native non-pesticide/herbicide treated tree with a minimum of 6-feet tall	\$250 PER 2.5-INCH DBH TREE	1	1 NATIVE TREE @ 2.5" CAL; 6' TALL	SEE LANDSCAPE PLAN (SHEET 08) FOR PROPOSED PLANTINGS 12 NATIVE TREES @ 4" CAL; 6' TALL MINIMUM 1 NATIVE TREE @ 2.5" CAL; 6' TALL MINIMUM
6"-13"	Replace with either two 4" inch native non-pesticide/herbicide treated trees; or four 2.5" native non-pesticide/herbicide treated trees. Each tree shall be a minimum of 6-feet tall.	\$250 PER 2.5-INCH DBH TREE; \$500 FOR EVERY 4-INCH DBH TREE	1	2 NATIVE TREES @ 4" CAL; 6' TALL	
13"-22"	Replace with either three 4" inch native non-pesticide/herbicide treated tree; or six 2.5" native non-pesticide/herbicide treated trees. Each tree shall be a minimum of 6-feet tall.	\$250 PER 2.5-INCH DBH TREE; \$500 FOR EVERY 4-INCH DBH TREE	0	N/A	
23"-32"	Replace with either four 4" inch native non-pesticide/herbicide treated tree; or eight 2.5" native non-pesticide/herbicide treated trees. Each tree shall be a minimum of 6-feet tall.	\$250 PER 2.5-INCH DBH TREE; \$500 FOR EVERY 4-INCH DBH TREE	0	N/A	
OVER 33"	Replace with either five 4" inch native non-pesticide/herbicide treated tree; or ten 2.5" native non-pesticide/herbicide treated trees. Each tree shall be a minimum of 6-feet tall.	\$250 PER 2.5-INCH DBH TREE; \$500 FOR EVERY 4-INCH DBH TREE	2	10 NATIVE TREES @ 4" CAL; 6' TALL	
			TOTAL: 12 NATIVE TREES @ 4" CAL; 6' TALL 1 NATIVE TREE @ 2.5" CAL; 6' TALL		

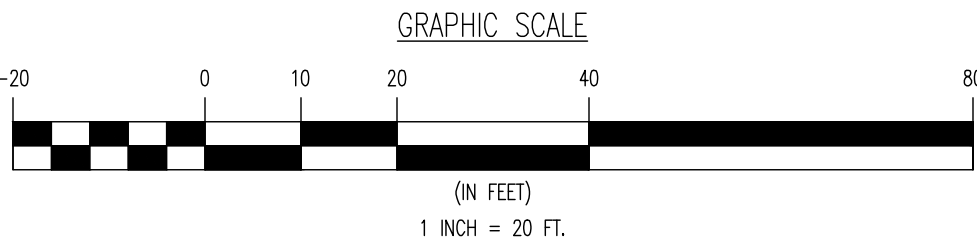
EXISTING TREE SPECIES KEY		
ABBREVIATION	LATIN NAME	COMMON NAME
AR	Acer rubrum	Red Maple
AP	Acer platanoides	Norway Maple
CG	Carya glabra	Pignut Hickory
PA	Picea abies	Norway Spruce
PC	Pinus caryinana	Collary Pear
PS	Pinus strobus	White Pine
PSB	Prunus serotina	Black Cherry
PSK	Prunus serrulata	Kwanzon Cherry
QR	Quercus rubra	Northern Red Oak
QP	Quercus palustris	Pin Oak

DEMOLITION PLAN LEGEND

- PROPOSED LIMIT OF DISTURBANCE LINE
- TPF --- TPF --- PROPOSED TREE PROTECTION FENCE LINE
- EXISTING IMPROVEMENTS TO BE REMOVED UNLESS OTHERWISE NOTED
- TREES TO REMAIN
- TREES TO BE REMOVED

EXISTING ELECTRICAL CONDUIT CONNECTIONS TO BE VERIFIED IN FIELD

SEE SHEET 3 OF 19 FOR DEMOLITION PLAN NOTES



THIS PLAN SET IS FOR PERMITTING PURPOSES ONLY AND MAY NOT BE USED FOR CONSTRUCTION

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TITLE: **DEMOLITION PLAN**

PROJECT: **MAVIS TIRE SUPPLY, LLC
PROPOSED AUTOMOTIVE SERVICE AND RETAIL CENTER**
BLOCK 105, LOT 64.01
460 PROSPECT AVENUE
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

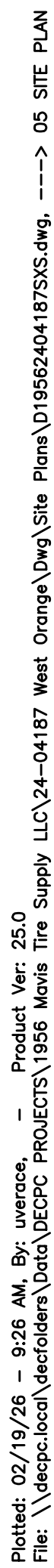
RODMAN R. RITCHIE
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 43547

ROBERT P. FREUD
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 41938

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(V) 1"=10'
SHEET No: **4**
OF 19
Rev. # 1



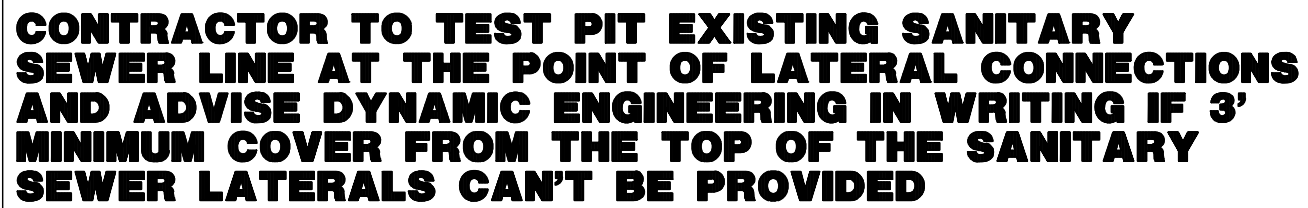
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GRADING/UTILITY GRAPHIC LEGEND

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GRAPHIC SCALE

(IN FEET)
1 INCH = 20 FT.

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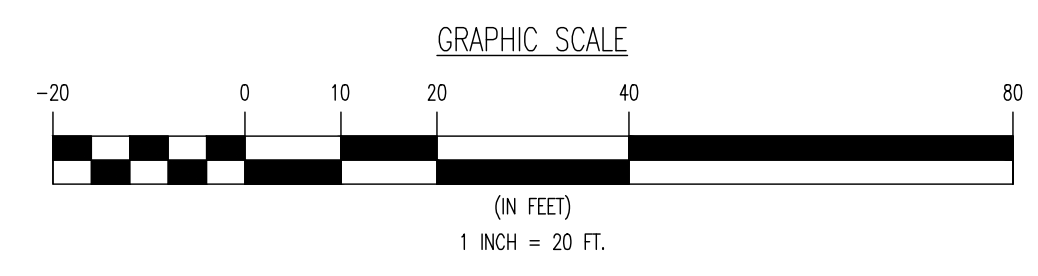
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Rev. # 1	1

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LANDSCAPE SCHEDULE					
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
SHADE TREE(S)					
QC	3	QUERCUS COCCINEA	SCHARLET OAK	4 - 4 1/2" CAL.	B+B
TA	2	TILIA AMERICANA 'REDMOND'	REDMOND LINDEN	4 - 4 1/2" CAL.	B+B
	5				
ORNAMENTAL TREE(S)					
ALS	3	AMELANCHIER LAEVIS 'SNOWCLOUD'	SNOWCLOUD SERVICEBERRY	4 - 4 1/2" CAL.	SINGLE STEM; B+B
CCR	1	CERCIS CANADENSIS 'JUNG'	EASTERN REDBUD THE RISING SUN	4 - 4 1/2" CAL.	SINGLE STEM; B+B
CTR	1	CORNUS FLORIDA RUBRA	PINK FLOWERING DOGWOOD	2 1/2-3" CAL.	SINGLE STEM; B+B
	5				
EVERGREEN TREE(S)					
IO	2	ILEX OPACA	AMERICAN HOLLY	6-8'	B+B
JVB	2	JUNIPERUS VIRGINIANA 'BURKI'	BURKI RED CEDAR	6-8'	B+B
JVC	2	JUNIPERUS VIRGINIANA 'CORCORCOR'	EMERALD SENTINEL RED CEDAR	4 - 4 1/2" CAL; 6-8'	B+B
	7				
EVERGREEN SHRUB(S)					
IGN	19	ILEX GLABRA X 'CHAMZIN'	NORDIC INKBERY	24-30"	#5 CAN
TBR	1	THUJA OCCIDENTALIS	SPREADING ENGLISH YEW	18-24"	B+B
	20				
DECIDUOUS SHRUB(S)					
APVS	1	AESULUS PARVIFLORA VAR SEROTINA 'ROGERS'	ROGERS BOTTLEBRUSH BUCKEY	30-36"	#7 CAN
CAH	7	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	HUMMINGBIRD SUMMERSWEET	24-30"	#5 CAN
COSS	7	CEPHALANTHUS OCCIDENTALIS 'JUG SHACK'	SUGAR SHACK BUTTON BUSH	24-30"	#5 CAN
CSF	10	CEANOTHUS AMERICANS	NEW JERSEY TEA	24-30"	#5 CAN
HF	13	ITEA VIRGINICA 'SANDWAVE'	'TIZZ' 'MEZZ' SWEETSPIRE	24-30"	#5 CAN
IMP	3	ILEX VERTICILLATA 'MR.POPPINS'	MR.POPPINS WINTERBERRY	24-30"	#5 CAN
IWR	5	ILEX VERTICILLATA 'ARROWPOPP'	BERRY POPPINS WINTERBERRY HOLLY	24-30"	#5 CAN
VOM	4	VBURNUM DENTATUM 'MORTON'	NORTHERN BURGUNDY ARROWWOOD VBURNUM	30-36"	#7 CAN
	50				
GROUND COVER					
AMGH	10	ARONIA MELANOCORPA 'UCONNARD12'	'GROUND HUC' CHOCBERRY	18" SPRD.	#3 CAN
JHBB	27	JUNIPERUS HORIZONTALIS 'BAR HARBOR'	BAR HARBOR CREEPING JUNIPER	18" SPRD.	#3 CAN
UNSB	38	LIROPE MUSCARI 'SUPER BLUE'	SUPER BLUE LILYART	2 GAL.	CONTAINER
RAGL	30	RHUS AROMATICA 'GRO-LOW'	GRO-LOW SUMAC	2 GAL.	CONTAINER
	105				
PERENNIAL(S)					
ET	6	EUPATORIUM FISTULOSUM	JOE PYE WEED	2 GAL.	CONTAINER
ORNAMENTAL GRASS(S)					
PNF	16	PANICUM VIRGATUM 'NAGRA FALLS'	NAGRA FALLS SWITCHGRASS	2 GAL.	CONTAINER

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

TITLE:	LANDSCAPE PLAN			JOB No: 1956-24-04187	DATE: 07/16/2025
PROJECT: MAVIS TIRE SUPPLY, LLC PROPOSED AUTOMOTIVE SERVICE AND RETAIL CENTER BLOCK 105, LOT 64.01 460 PROSPECT AVENUE TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY	RODMAN R. RITCHIE	MARLA A. ROLLER	DRAWN BY: TNH	SCALE: (H) 1"=20' (V)	SHEET NO: 8
Comments	Date	Rev	PROFESSIONAL ENGINEER NEW JERSEY LICENSE No. 43547	LICENSED LANDSCAPE ARCHITECT NEW JERSEY LICENSE No. 2145A0053700	 PROTECT YOURSELF ALL SITES REQUIRE NOTIFICATION OF EXISTING, RECORDS, OR ANY PERSON REQUIRED TO EXCAVATE THE EARTH SURFACE ANYWHERE IN ANY STATE
					OF 19
					Rev. # 1

2. PLANT MATERIAL SHALL BE FURLED AND INSTALLED AS INDICATED; INCLUDING ALL LAWN, MATERIALS, PLANTS, EQUIPMENT, INCIDENTALS, AND CLEAN-UP.
3. LANDSCAPE ARCHITECT SHALL BE RESPONSIBLE FOR PLANTING AT CORRECT GRACES AND ALIGNMENT. LAYOUT TO BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
4. PLANTS SHALL BE TYPICAL OF THE SPECIES AND VARIETY HAVE NORMAL GROWTH HABITS, WELL DEVELOPED BRANCHES, DENSELY FOLIATED, WINDWARD, PROPERLY SHAPED, FREE FROM DEFECTS AND INJURY.
5. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL.
6. GUARANTEE OF GROWTH: GUARANTEE OF GROWTH FOR TREES AND SHRUBS: GUARANTEE OF GROWTH SHALL BE MADE FOR A GROWTH GUARANTEE OF AT LEAST ONE (1) YEAR FROM THE DATE OF ACCEPTANCE FOR TREES AND SHRUBS. REPLACEMENTS SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING PLANTING SEASON. ALL REPLACEMENTS SHALL HAVE A GUARANTEE QUOTE, THAT STATED ABOVE.
7. INsofar AS IT IS PRACTICABLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THIS IS NOT POSSIBLE, THE DELIVERY OF PLANT MATERIAL SHALL BE MADE WITHIN THREE (3) DAYS OF DELIVERY. PLANT MATERIAL NOT INSTALLED DURING THIS PERIOD WILL BE REJECTED.
8. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH ANSI Z60.1 (REV. 2001) "AMERICAN STANDARD FOR THE QUALITY OF PLANTS AND PLANT MATERIALS" AND THE LANDSCAPE ASSOCIATION.
9. ALL PLANTS SHALL BE PLANTED IN AMENDED TOPSOIL THAT IS THOROUGHLY WATERED AND TAMPED AS BACK FILL. CONSIDERATIONS: PLANTING SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING: PLANTING AREAS TO BE PREPARED, FERTILIZED AND SOIL COMPOSITIONS TO BE STATED IN PLANTING SPECIFICATIONS.
10. PLANTS SHALL NOT BE SOUND WITH HOLE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. PLANTS SHALL BE PLANTED FROM THE BOTTOM OF THE BALL ONLY.
11. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE MOST FAVORABLE. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WHEN THERE IS NO FROST OR FROSTING. IN THE EVENT OF FROZEN CONDITIONS, ALL PLANT MATERIAL SHALL BE SPRAYED WITH WET-PRUIN OR EQUAL AS PER MANUFACTURER'S INSTRUCTIONS.
12. PLANTS EXCEPT TREES SHALL BE PLANTED WITHIN THE PLANTING PERIODS AND SHALL BE PLANTED WITHIN THE PLANTING PERIODS.
13. SET ALL PLANT PLUMB AND STRAIGHT, SET AT SUCH ANGLE THAT A NORMAL OR NATURAL RELATIONSHIP TO THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE PLANT IN THE CENTER OF THE PIT.
14. APPROXIMATELY 1/3 OF THE GROWTH OF LARGE TREES (2" CALIPER AND OVER) BY THE REMOVAL OF SUPERFLUOUS BRANCHES; THOSE PLANTS WHICH RUN PARALLEL, OR MAIN LEADER OF TREES WILL NOT BE CUT BACK. LONG SIDE BRANCHES, HOWEVER, MUST BE SHORTENED.
15. EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE TO PRESERVE NATURAL CHARACTER OF PLANT.
16. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES AS A RESULT OF CONSTRUCTION OPERATIONS. ALL EXISTING TREES TO BE REMOVED SHALL BE FELLED AND CHIPPED OR CHIPPED AND REMOVED. ALL EXISTING TREES TO BE REMOVED SHALL BE CHIPPED AND REMOVED. ALL EXISTING TREES TO BE REMOVED SHALL BE CHIPPED AND REMOVED. ALL EXISTING TREES TO BE REMOVED SHALL BE CHIPPED AND REMOVED.
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18. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE AS SHOWN ON THE APPROVED LANDSCAPE PLAN SHALL BE INSTALLED. THE LANDSCAPE ARCHITECT SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE LANDSCAPE. THE LANDSCAPE ARCHITECT SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS: THE PLANTING OF TREES, SHRUBS, VINES, AND OTHER PLANTS SHALL BE INSTALLED DURING THE FOLLOWING PLANTING SEASONS:
19. THE LANDSCAPE ARCHITECT SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE LANDSCAPE. THE LANDSCAPE ARCHITECT SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS: THE PLANTING OF TREES, SHRUBS, VINES, AND OTHER PLANTS SHALL BE INSTALLED DURING THE FOLLOWING PLANTING SEASONS:

FURTHERMORE, THE FOLLOWING TREE VARIETIES SHALL NOT BE PLANTED DURING THE FALL PLANTING SEASON DUE TO THE HAZARDS ASSOCIATED WITH DIGGING THESE TREES IN THIS SEASON.

PLANTING SPECIFICATIONS

- A. WORK SHALL CONSIST OF PERFORMING, CLEARING AND SOIL PREPARATION, FINISH GRADING, PLANTING AND DRAINAGE, INCLUDING ALL THE FOLLOWING MATERIALS, TOOLS, EQUIPMENT, AND ANY OTHER APPLIANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT.
- MATERIALS
1. MANURE - ALL MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION (D.O.T.) MANUAL OF ROADWAY AND BRIDGE CONSTRUCTION (LATEST EDITION) OR APPROVED EQUAL.
2. TOPSOIL - ALL TOPSOIL SHALL BE FREE FROM NORMAL CROPPED AREA PESTS, WEEDS, DISEASE AND INSECTS.
3. TOPSOIL - "LIAMY SLT," HAVING AN ORGANIC CONTENT NOT LESS THAN .5% BY WEIGHT, WITH PARTICLES BETWEEN 4.5 - 7, BE FREE OF BERBS, ROCKS AND STONES LARGER THAN TWO INCHES DIAMETER. VEGETABLE MATTER SHALL NOT EXCEED 10% BY WEIGHT.
4. MULCH - FOUR (4") INCHES DEEPLY SHREDDED HARDWOOD BARK MULCH.
5. FERTILIZER AND SOIL CONDITIONER - PLANTED AREAS SHALL BE TREATED WITH MINIMAL CONTENT OF 1% NITROGEN AND 2% PHOSPHORIC ACID, EQUAL TO "NUTRIUMS".
6. ORGANIC FERTILIZER AND SOIL CONDITIONER - SHALL BE "ORG-PROMO" AND ORGANIC BASE MATERIALS COMPOSED OF DECOMPOSED ANIMAL AND VEGETABLE MATTER AND COMPOST TO "SUPPORT" BACTERIAL CULTURES, CONTAINING NO POULTRY OR HUMAN WASTE.
- GENERAL WORK PROCEDURES
1. CONTRACTOR SHALL COMMENCE AS SOON AS THOSE PORTIONS OF THE SITE ARE AVAILABLE; CONTRACTOR SHALL UTILIZE WORKMANLIKE STANDARDS.
2. CONTRACTOR SHALL BE PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH DAY'S WORK. ALL BERBS, MATERIALS, AND TOOLS SHALL BE PROPERLY STOCKPILED OR DISPOSED OF. ALL PAVED SURFACES SHALL BE SWEPT CLEAN AT THE END OF EACH DAY'S WORK.
- WEEDING
1. WEEDING AND DURING PRELIMINARY GRADING AND FINISH GRADING, ALL WEEDS AND GRASSES SHALL BE DIG UP WITH THE ROOTS AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
- B. SEEDING
1. CONTRACTOR TO PROVIDE A 4" THICK TOPSOIL LAYER IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO PRODUCE A 1" UNDISTURBED THINNENESS, TOPSOIL PRESENT AT THE SITE IF ANY, MAY BE USED TO SUPPLEMENT TOTAL TOPSOIL REQUIRED TO MEET THE 4" TOPSOIL CRITERIA. TOPSOIL SHALL BE SPREAD TO MAINTAIN PLANTING AREAS ABOVE pH 4.0 AND NUTRIENT LEVELS AS REQUIRED TO ENSURE AN ACCEPTABLE GROWING MEDIUM.
- C. CULTIVATION
1. CULTIVATE ALL AREAS TO BE PLANTED TO A DEPTH OF 6". ALL BERBS DERIVED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE. SPREAD EVIDENT IN ALL PLANTING AREAS AND TERR. (2 DIRECTIONS) INTO TOP 4" WITH THE FOLLOWING PER 1,000 SQ. FT.: "ORG-PROMO"
- TO RUNS AGRICULTURAL GYPHUM

20 POLYBUTYLENE TEREPHTHALATE) 36-0-0 BLUE CHL

A. THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6 TO 12 IN. OF MOST PLANTING SOILS TO IMPROVE THE SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS. SOILS THAT ARE HEAVY OR HEAVILY COMPACTED SHOULD BE COMPOSED OF 50% TOPSOIL, 25% COMPOST, 15% SAND, 10% FINE GRASS, 5% FINE MULCH, 5% DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.

B. MODIFY HEAVY CLAY OR SILT MORE THAN 40% CLAY OR SILT BY ADDING COMPOSTED PINE BARK (UP TO 50% BY VOLUME) AND/OR VERMICULITE. ADD SAND TO SOIL TO AVOID BRINGING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX.

C. IMPROVE DRAINAGE IN HEAVY SOILS BY PLANTING ON RAISED MOUNDS OR BEDS AND INCLUDING SUBSIDIARY DRAINAGE LINES.

D. MODIFY HEAVY OR SILTY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDED CLAY CLUMP UP TO 30% OF THE TOTAL MIX.

E. PLANTING

1. TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE EXCAVATING PITs, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

2. PREPARE A 12" DEEP SAND PIT TO BE LOCATED AT LEAST 12" AWAY FROM THE TRUNK OF EACH TREE. TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST IN UNDISTURBED GRADE. EACH CROWN PIT SHALL BE BACK FILLED WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:

1. PART CROWN MANURE BY VOLUME

2. GRAY AGGREGATE PLANTING TABLETS AS FOLLOWS:

3. PARTS TOPSOIL BY VOLUME

21. GRAY AGGREGATE PLANTING TABLETS AS FOLLOWS:

1. TABLETS PER 1 GAL. PLANT

2. TABLETS PER 1/2 GAL. PLANT

3. TABLETS PER 1/4 GAL. PLANT

4. TABLETS PER 1/8 GAL. PLANT

F. LARGER PLANTS (2) TWO TABLETS PER 1/2" DIAM. OF TRUNK CROWN

G. PREPARED SOIL SHALL BE TAMPED INTO THE BOTTOM OF PIT. PREPARED SOIL AROUND BALL OF PLANT 1/2" MAX. AND INSERT PLANT TABLETS. COMPLETE BACK FILL AND WATER THOROUGHLY.

H. AFTER PLANTING, BE SURE THAT THEY BEAR THE SAME RELATION TO THE REQUIRED GRADE AS THEY BORE TO THE NATURAL GRADE.

I. BEFORE BEING TRANSPLANTED.

J. PREPARE RAISED BASKIN BASIN AS WELL AS PLANTING HOLE OF EACH TREE.

K. PLANTING SHALL BE DONE IN SUCH MANNER AS NOT TO DISTURB BACK FILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED.

L. F. FILL AND PROPOSED TREES DIRECTLY ADJACENT TO MAJLWAYS TO A MIN. OF 7' BRANCHING HEIGHT.

M. GROUND COVER

1. ALL GROUND COVER AREAS SHALL RECEIVE A 1/4" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING

2. SPACING AND VARIETY OF GROUND COVER SHALL BE AS SHOWN ON DRAWINGS.

3. PLANTING GROUND COVER CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREPARED SOIL AND GROUND COVER.

4. ALL GROUND COVER AREAS SHALL BE TREATED WITH A PRE-EMERGENT BEFORE FINAL LANDSCAPE INSPECTION. GROUND COVER AREAS SHALL BE WEEDED PRIOR TO APPLYING PRE-EMERGENT. PRE-EMERGENT TO BE APPLIED AS PER MANUFACTURER'S RECOMMENDATION.

N. OTHER PLANTING

1. ALL AREAS WILL BE RECEIVED BY THE CONTRACTOR AT SUBSTANTIALLY PLUS/MINUS 1 FOOT OF FINISH GRADE.

2. PLANTING SHALL BE DONE IN ACCORDANCE WITH THE PLANS AND TO A SMOOTH, EVEN AND UNIFORM FINISH. ALL PLANTING SHALL BE PLANTING UNLESS OTHERWISE DIRECTED BY LANDSCAPE ARCHITECT. SOIL AREAS ADJACENT TO THE BUILDINGS SHALL SLOPE AWAY.

3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER.

- CONTRACTOR SHALL GUARANTEE PLANTS FOR A PERIOD OF ONE (1) YEAR FROM ACCEPTANCE OF JOB. OWNER TO SECURE A MAINTENANCE CONTRACT WITH A QUALIFIED MAINTENANCE FIRM TO BE COMPLETED BY THE END OF THE GUARANTEE PERIOD. CONTRACTOR TO BE RELEASED AT THE COMMENCEMENT OF THE GUARANTEE PERIOD AND PASSES A FINAL INSPECTION BY THE OWNER OR OWNER'S AGENT.
2. CLEANUP
- A. AT THE COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM CLEANED AND THE SITE LEFT IN A NEAT AND ORDERLY MANNER.
- B. MAINTAIN TREES, SHRUBS AND OTHER PLANTS BY PRUNING, CULTIVATING AND WEEDING AS REQUIRED FOR HEALTHY GROWTH. RESTORE TO ORIGINAL CONDITION OR BETTER. PRUNING SHALL BE DONE IN ACCORDANCE WITH THE STANDARD PRACTICES OF THE INDUSTRY. PRUNING POSITION AS REQUIRED. RESTORE OR REPLACE DAMAGED WRAPPINGS. SPRAY WITH HERBICIDE AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF WEEDS.
- C. MAINTAIN LAWS BY WATERING, FERTILIZING, WEEDING, MOOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGRAVING AND SOFTENING SOIL TO ESTABLISH A SMOOTH, GRASSY, CARPET-LIKE SURFACE. MAINTAIN GRASS AND BARE AREAS.
3. MAINTENANCE ALTERNATE: ONE MONTH PER MONTH AFTER 12 MONTHS FROM DATE OF COMPLETION OF WORK.

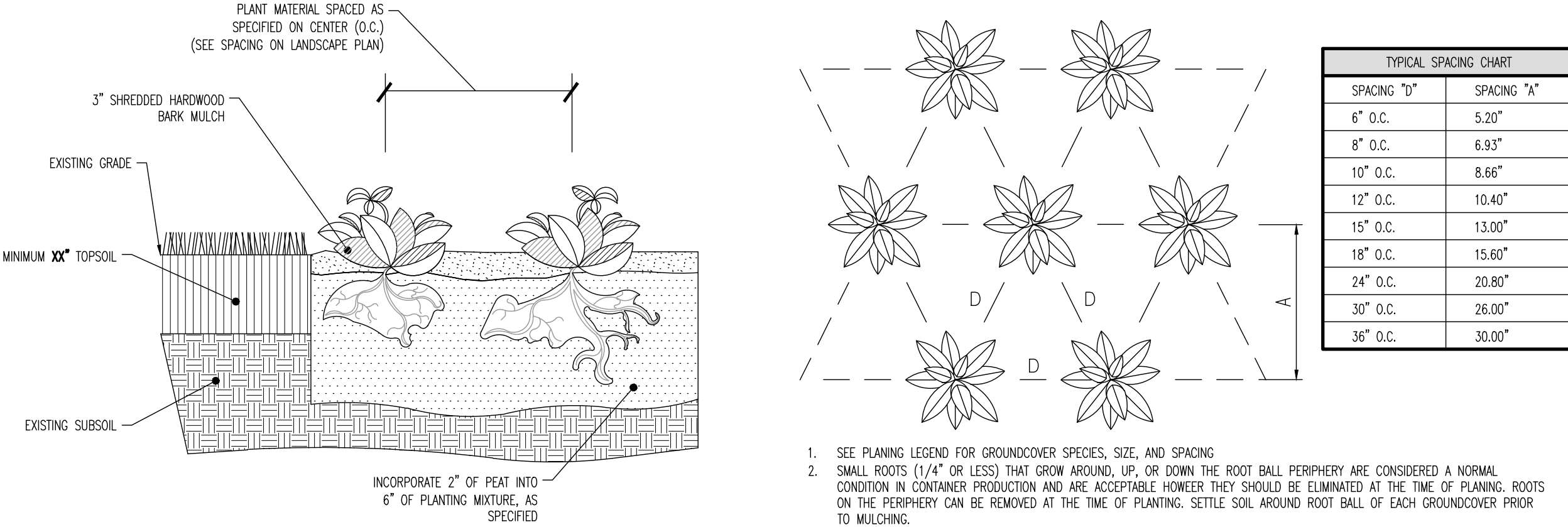


Diagram illustrating the installation of a shrub into a container, showing the root ball, soil, and mulch layers.

Labels and Dimensions:

- REMOVE ALL EXCESS SOIL FROM ROOT FLARE PRIOR TO PLANTING
- INCORPORATE COMMERCIALY PREPARED MYCORRHIZAE SPORES AND FERTILIZER TABLETS IN THE SOIL IMMEDIATELY AROUND THE ROOT BALL AT RATE SPECIFIED BY THE MANUFACTURER
- PRIOR TO INSTALLATION CONFIRM THE SOILS WILL DRAIN PROPERLY IF NECESSARY PROVIDE PROPER DRAINAGE
- THOROUGHLY SOAK THE ROOT BALL AND THE ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
- PREPARE SOIL IN THE ENTIRE BED USING PROCEDURES OUTLINED IN SOIL MODIFICATION TABLE
- 8-12"
- BAG
- CONTAINER
- 3" DOUBLE-SHREDDED HARDWOOD BARK MULCH (DO NOT PUT MULCH AGAINST THE BASE OR WITHIN 4" OF THE PLANT).
- FINISHED GRADE
- 12" to 18" (FROM FINISHED GRADE TO TOP OF ROOT BALLS MAKE DEPTH MIN 4" DEEPER THAN THE BALL)
- PLANT SHALL BE TRANSPLANTED AT THE SAME GRADE AS IT BORE IN THE NURSERY PLOT PRIOR TO BAILING AND BURLAPPING. CUT AND REMOVE BURLAP FROM TOP ONE-THIRD OF ROOT BALL AS SHOWN.
- NATIVE SOIL
- UNDISTURBED SUBGRADE
- PLACE SHRUB ON FIRM SOIL IN BOTTOM OF HOLE.
- 24" MINIMUM
- SOIL SURFACE ROUGHENED TO BIND WITH NEW SOIL
- USE FINGER OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF BALL

NOT TO SCALE

ROOT FLARE

EXCESS ALIEN SOIL TO BE REMOVED

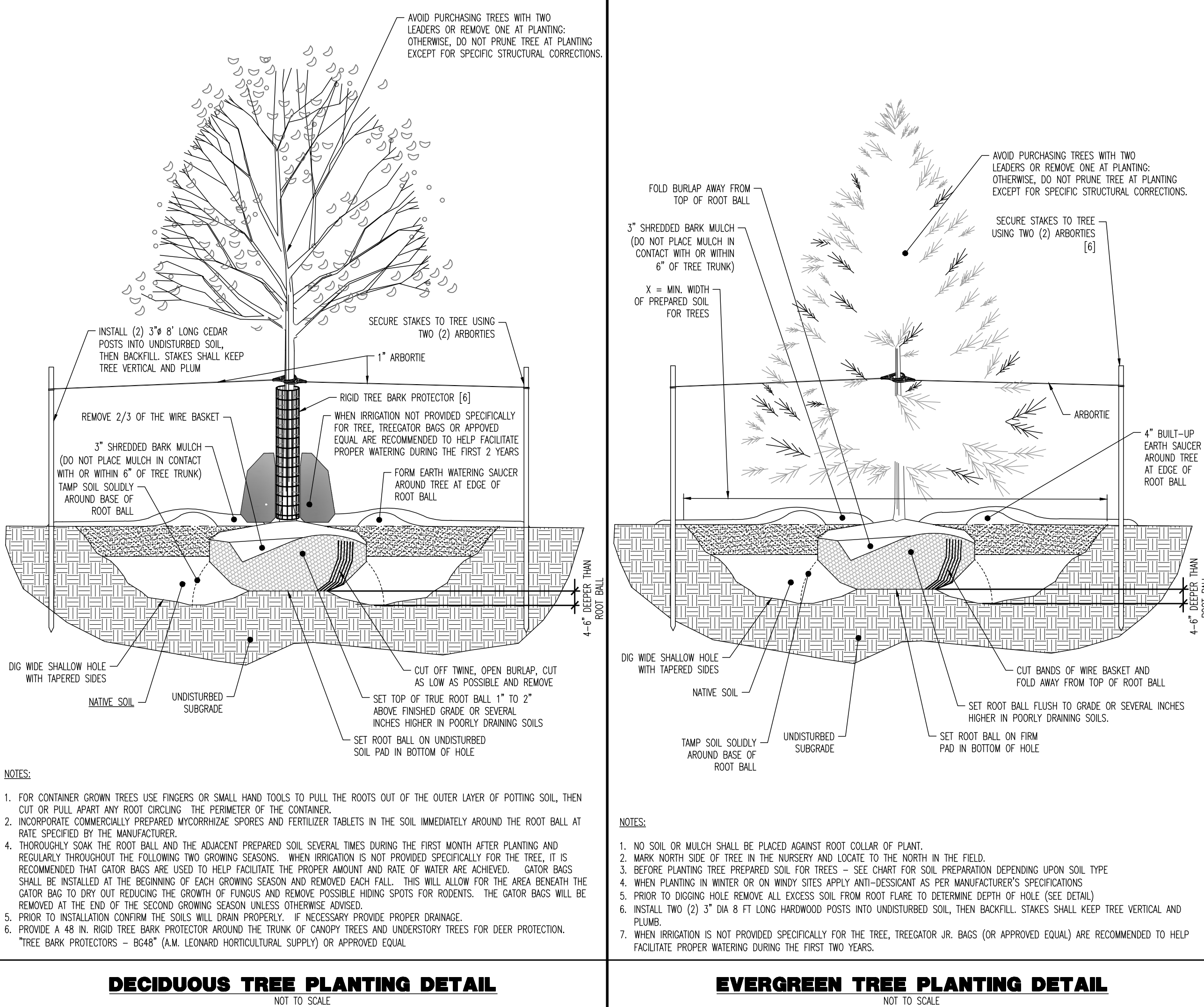
TRUE TOP OF ROOT BALL

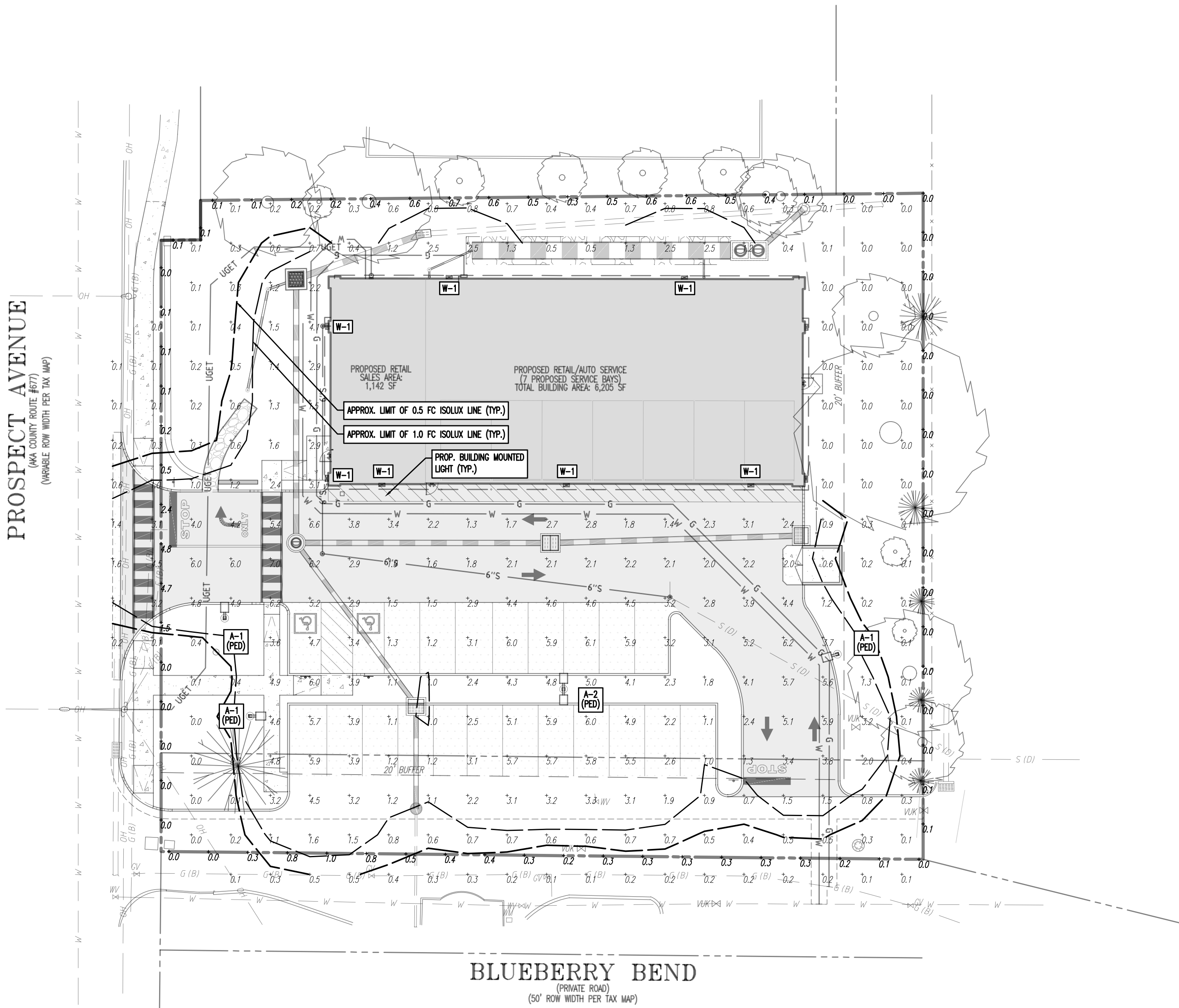
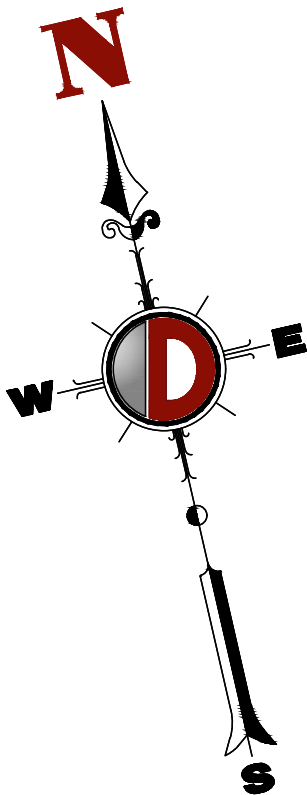
NOTES:

1. PRIOR TO DIGGING TREE AT NURSERY LOCATE THE ROOT FLARE. THIS WILL ALLOW FOR PROPER ROOT BALL SIZING BEFORE DIGGING.
2. PRIOR TO PLANTING, VERIFY THE TOP ELEVATION OF THE TRUE ROOT BALL BY REMOVING BURLAP. IF ALIEN SOIL IS PRESENT REMOVE UNTIL ROOT FLARE IS EXPOSED.
3. AT THIS TIME ANY GIRDLING OR CIRCLING ROOTS SHOULD BE REMOVED. EXCESSIVE GIRDLING OR CIRCLING ROOTS WILL CAUSE THE TREE TO BE REJECTED.
4. ONCE SOIL IS REMOVED RETIE DRUM LACING. IF BASKET IS PRESENT, RETIE TO BASKET.
5. IF TOO MUCH SOIL IS REMOVED IN THE FIELD THE ROOT BALL IS EFFECTIVELY UNDERSIZED AND WILL BE REJECTED.

TREE ROOT FLAIR DIAGRAM

NOT TO SCALE

[illegible]



Mirada Small Area Light (MRS)

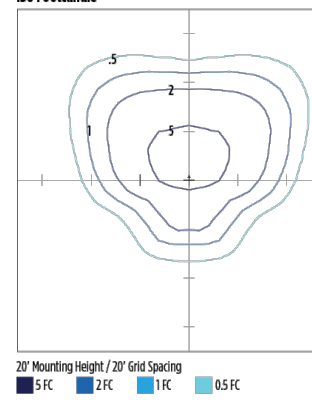
PHOTOMETRICS (CONT)

MRS-LED-18L-SIL-FT-40-70CRI

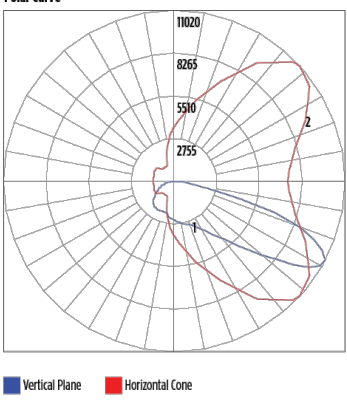
Luminaire Data		
Type/Description	4000 Kelvin, 30-30	
Subtotal Lumen	12,000	
Watts	18	
Efficiency	100	
LED Type	Type II - Street	
Wavelength	40-42	

Zonal Lumen Summary		
Zone	Lumen	% Luminance
Zone 1 (0-10')	200	1%
Zone 2 (10-20')	500	4%
Zone 3 (20-30')	1000	8%
Zone 4 (30-40')	2000	16%
Zone 5 (40-50')	4000	32%
Zone 6 (50-60')	8000	64%
Zone 7 (60-70')	12000	100%

50 Footcandle



Polar Curve

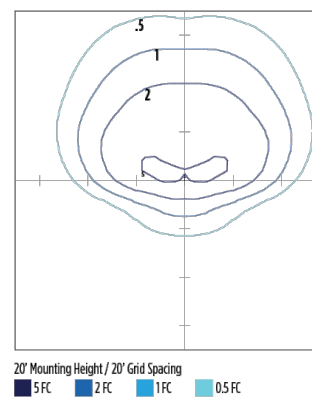


MRS-LED-18L-SIL-4-40-70CRI

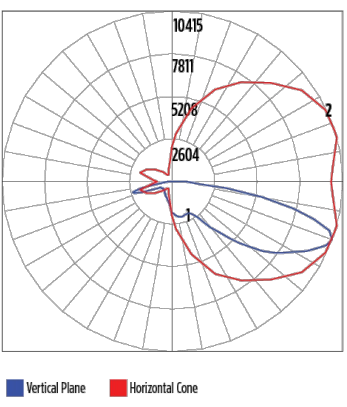
Luminaire Data		
Type/Description	4000 Kelvin, 30-30	
Subtotal Lumen	8000	
Watts	12	
Efficiency	100	
LED Type	Type II - Very Short	
Wavelength	40-42	

Zonal Lumen Summary		
Zone	Lumen	% Luminance
Zone 1 (0-10')	100	1%
Zone 2 (10-20')	200	2%
Zone 3 (20-30')	400	4%
Zone 4 (30-40')	800	8%
Zone 5 (40-50')	1600	16%
Zone 6 (50-60')	3200	32%
Zone 7 (60-70')	6400	64%
Zone 8 (70-80')	8000	100%

100 Footcandle

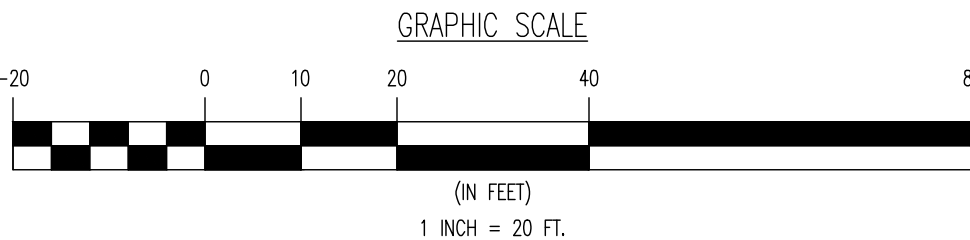


Polar Curve



EXISTING LIGHT AND LANDSCAPE FEATURES HAVE NOT BEEN MODELED AS A PART OF THIS LIGHTING PLAN

SEE SHEET 11 OF 19 FOR LIGHTING PLAN NOTES AND DETAILS



LIGHTING DESIGN PREPARER NOTES

A. THE LIGHTING DESIGN APPEARING ON THIS PLAN WAS PREPARED BY DYNAMIC ENGINEERING, PC (PROJECT NO. 1956-24-04187).
DYNAMIC ENGINEERING, PC CONTACT INFORMATION:
5 GREENTREE CENTRE, SUITE 406
MARTIN, NJ 08053
PHONE: (856) 334-2000

LIGHTING LUMINAIRE SCHEDULE											
SYMBOL	QUANTITY	LABEL	WATTAGE	MOUNTING HEIGHT	ARRANGEMENT	B-U-G RATING	LIGHT LOSS FACTOR	MANUFACTURER	DESCRIPTION	FIXTURE COLOR/FINISH	POLE COLOR/FINISH
	7	W-1	24	12.5	WALL MOUNTED	B1-U0-G0	0.900	LITHONIA	MPX1-LED-P2-30K-MVOLT-DIMXO	WHITE	N/A
	3	A-1	111	18	SINGLE	B2-U0-G2	0.900	LSI	MRS-LED-15L-SIL-FT-40-70CRI-IL	BLACK	BLACK
	1	A-2	111	18	BACK-TO-BACK	B2-U0-G2	0.900	LSI	MRS-LED-15L-SIL-FT-40-70CRI-IL	BLACK	BLACK

ISO CURVE LINES ARE MAINTAINED AND SHOWN AT 1.0, 0.5, AND 0.1 FC.

(FM) - FLUSH MOUNT FOUNDATION (PED) - PEDESTAL FOUNDATION

THE CALCULATIONS SHOWN WERE MADE UTILIZING ACCEPTED PROCEDURES OF THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA. VARIATIONS IN LAMP OUTPUT, BALLAST OUTPUT, LINE VOLTAGE, DIRT DEPRECIATION, AND OTHER FACTORS MAY AFFECT ACTUAL RESULTS. UNLESS OTHERWISE STATED, ALL RESULTS ARE MAINTAINED VALUES, UTILIZING ACCEPTED LIGHT LOSS FACTORS (LLF).

STATISTICAL AREA SUMMARY					
LABEL	REQUIRED MINIMUM	REQUIRED MAXIMUM	AVERAGE	PROPOSED MAXIMUM	PROPOSED MINIMUM
PROPERTY LINE (NON-RESIDENTIAL)	N/A	0.5	0.00	0.1	0.0
PROPERTY LINE (RESIDENTIAL)	N/A	0.3	0.00	0.1	0.0
PARKING AREAS	2.0	N/A	3.48	7.0	0.0
PEDESTRIAN WALKWAYS	0.9	N/A	4.09	7.0	0.0

THIS PLAN SET IS FOR PERMITTING PURPOSES ONLY AND MAY NOT BE USED FOR CONSTRUCTION

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TITLE: **LIGHTING PLAN**

PROJECT: **MAVIS TIRE SUPPLY, LLC
PROPOSED AUTOMOTIVE SERVICE AND RETAIL CENTER**
BLOCK 105, LOT 64.01
460 PROSPECT AVENUE
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

DESIGNED BY: RPK
CHECKED BY: KED
DATE: 07/16/2025
SCALE: (H) 1"=20'
SHEET No: 10 OF 19

RODMAN R. RITCHIE
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NEW JERSEY LICENSE No. 43547

ROBERT P. FREUD
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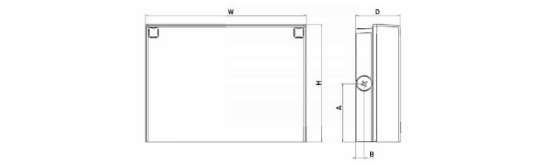


WPX LED Wall Packs



Color Temp	WPX1 LED P2 30K MVOLT DWHXD
Power	
Size	
Part	SLA

Specifications



Luminaire	Height (H)	Width (W)	Depth (D)	Size (S)	Color Temp (CT)	Weight
WPX1	13.125 (3.44)	11.125 (3.44)	1.2 (3.18)	4	3000K	6.1 (1.36)
WPX2	17.125 (4.36)	15.125 (3.89)	1.2 (3.18)	6	3000K	8.1 (1.78)
WPX3	21.125 (5.37)	19.125 (4.91)	1.2 (3.18)	8	3000K	10.1 (2.23)

Ordering Information

EXAMPLE: WPX2 LED 40K MVOLT DBXBD

Series	Color Temperature	Voltage	Options	Finish
WPX1 LED P1	3000K	120V	None	Black
WPX1 LED P2	3000K	120V	None	Black
WPX2 LED	3000K	120V	None	Black
WPX3 LED	3000K	120V	None	Black

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:**
- All WPX wall packs come with an integrated thermal management system (ITMS) and are designed to provide a safe, efficient, energy-efficient solution for the new generation of outdoor lighting. The WPX1, WPX2 and WPX3 are ideal for replacing up to 100W, 200W, and 400W HID luminaires respectively. WPX luminaires deliver a uniform, wide distribution of light over a 120° beam angle.
 - Battery pack options only available on WPX1 and WPX2.
 - Battery pack options not available with WPX3 or PC options.

FEATURES & SPECIFICATIONS

The WPX LED wall packs are designed to provide a safe, efficient, energy-efficient solution for the new generation of outdoor lighting. The WPX1, WPX2 and WPX3 are ideal for replacing up to 100W, 200W, and 400W HID luminaires respectively. WPX luminaires deliver a uniform, wide distribution of light over a 120° beam angle.

CONSTRUCTION: WPX features die-cast aluminum main body with integral thermal management that both protects the LED chips and reduces component life. The luminaires are IP66 rated, and sealed against moisture and environmental contaminants.

ELECTRICAL: WPX supports configurations of up to 100W, 200W, and 400W LED luminaires with an integrated thermal management system (ITMS) and are designed to provide a safe, efficient, energy-efficient solution for the new generation of outdoor lighting. The WPX1, WPX2 and WPX3 are ideal for replacing up to 100W, 200W, and 400W HID luminaires respectively. WPX luminaires deliver a uniform, wide distribution of light over a 120° beam angle.

WARRANTY: WPX features a 5-year warranty. This is the only warranty provided and is not transferable to the purchaser. The warranty is void if the luminaire is not installed and maintained in accordance with the instructions provided in the user manual. The warranty is void if the luminaire is not installed and maintained in accordance with the instructions provided in the user manual.

Notes: The standard WPX LED wall packs are designed to provide a safe, efficient, energy-efficient solution for the new generation of outdoor lighting. The WPX1, WPX2 and WPX3 are ideal for replacing up to 100W, 200W, and 400W HID luminaires respectively. WPX luminaires deliver a uniform, wide distribution of light over a 120° beam angle.

WPX LED
Rev: 07/19/24



Mirada Small Area (MRS)

Outdoor LED Area Light



OVERVIEW

Luminaire Package	6,000 - 30,000
Warranty Range	3 - 5 Years
Efficiency Range (LPW)	112 - 161
Control Options	20 (30)

QUICK LINKS

Ordering Guide Performance Photometrics Dimensions

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Cast aluminum wiring access door located underneath.
- Features are finished with 'Silks DuraGrip' polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: 27 lbs in carton.

Optical System

- State-of-the-Art one piece silicone optic sheet delivers industry leading optical control with an integrated gasket to provide IP66 rated seal.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in distribution types 2, 3, 4, 5, 6, 7, and LC/RC.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 95-98%.
- Zero uplight.

Controls

- Optional integral passive infrared Bluetooth® motion and protocol sensor. Features operate independently and can be commissioned via iOS or Android configuration app.
- Art-Link® Blue wireless control system with technology partner. Slave incorporates Luminaire Level Lighting Controls (LLC) and high-end trim.

Electrical

- High-performance driver features over-voltage, under-voltage, short-circuit and over-temperature protection.
- 0-10V dimming (0% - 100%) standard.
- Standard Universal Voltage (120-277 VAC) input 50/60 Hz or optional High Voltage (347-480 VAC).
- L70 Calculated Life: >60K Hours
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F). 30L lumen packages rated to +40°C.
- Power factor > 90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation per ANSI/IEEE C82.42-3.

Installation

- Designed to mount to square or round poles.
- A single fastener secures the hinged door, underneath the housing and provides quick & easy access to the electrical compartment.
- Included terminal block accepts up to 12 ga. wire.
- Utilizes LSI's traditional B3 drill pattern.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to <https://www.lsi.com/support/faq/faq-warranty> for more information.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- Densely approved with 3000K color temperature selection and fixed mounting.
- Title 24 Compliant: see local ordinance for qualification information.
- RoHS compliant.

Notes

- LSI luminaires carry a 5-year limited warranty. This is the only warranty provided and is not transferable to the purchaser. The warranty is void if the luminaire is not installed and maintained in accordance with the instructions provided in the user manual. The warranty is void if the luminaire is not installed and maintained in accordance with the instructions provided in the user manual.

Notes: The standard WPX LED wall packs are designed to provide a safe, efficient, energy-efficient solution for the new generation of outdoor lighting. The WPX1, WPX2 and WPX3 are ideal for replacing up to 100W, 200W, and 400W HID luminaires respectively. WPX luminaires deliver a uniform, wide distribution of light over a 120° beam angle.

WPX LED
Rev: 07/19/24

Mirada Small Area Light (MRS)

New specification call at (800) 456-7800

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ORDERING GUIDE

EXAMPLE: MRS LED 30K SL FT DMV DM 40 7000 ALUMINUM BLK H

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Optics Rotation

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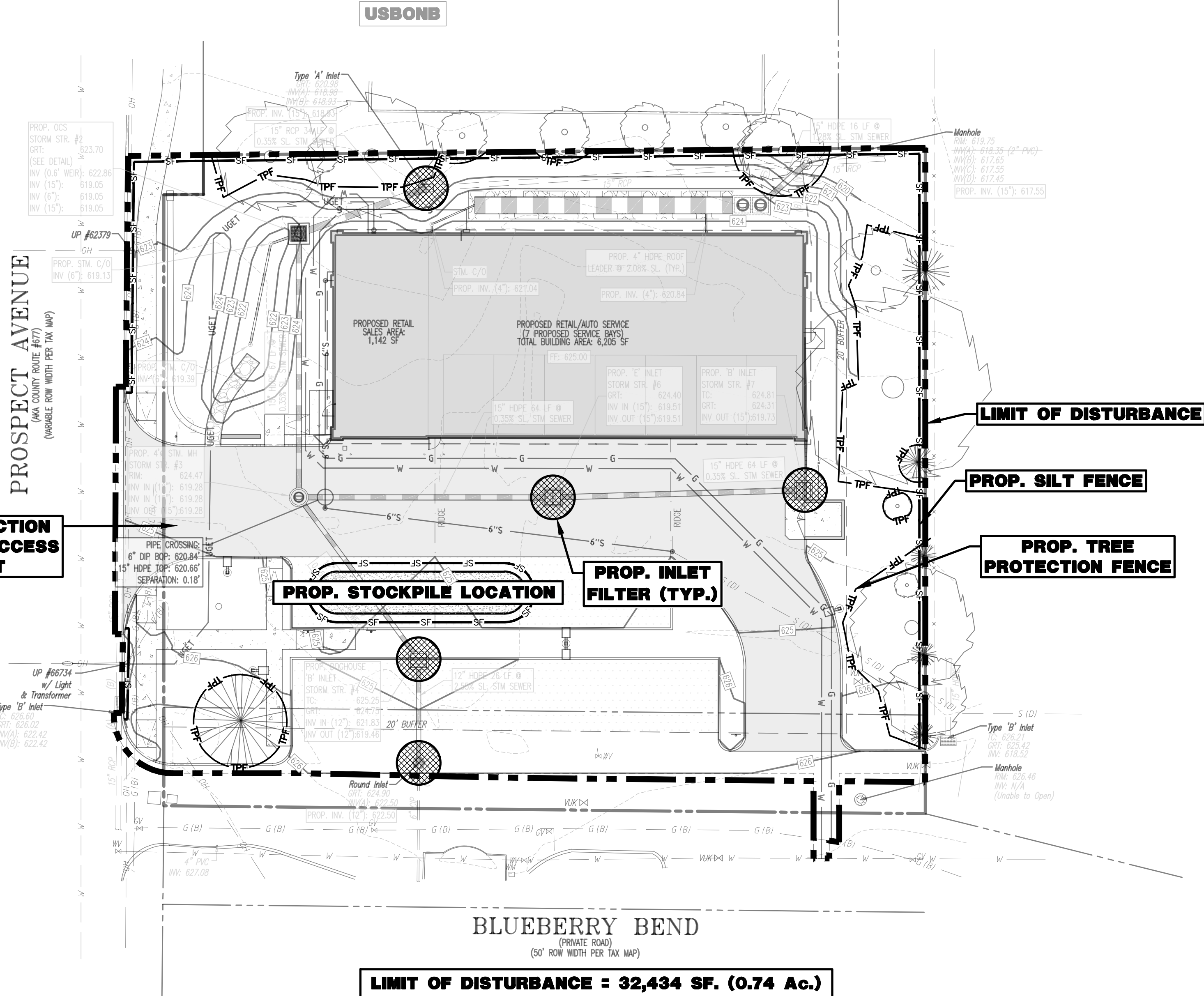
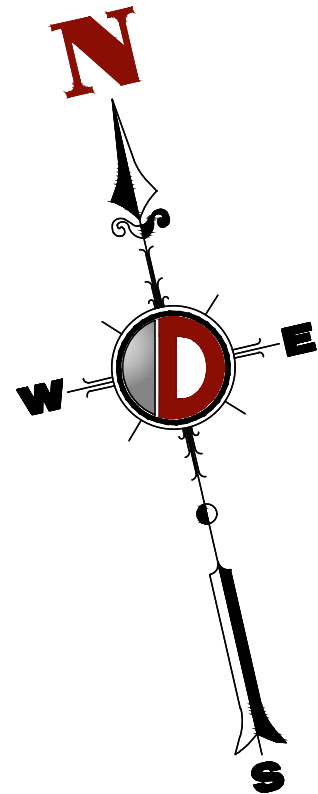
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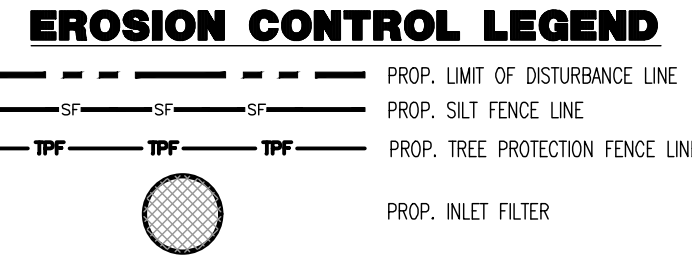
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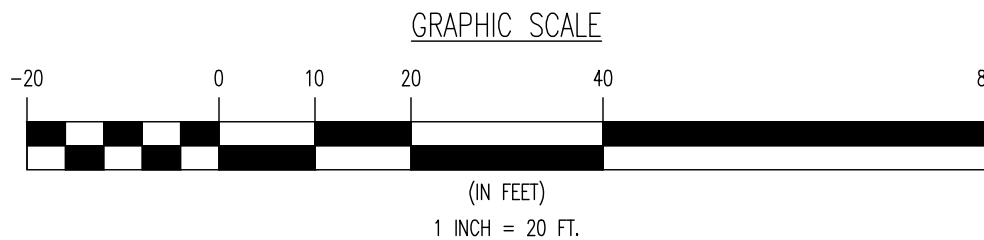


SOIL COMPACTION EXEMPTION NOTE
AS DETERMINED BY NJ GEOWEB MAPPING, THIS PROJECT AREA FALLS WITHIN THE METROPOLITAN PLANNING AREA (PA1). UNDER EXISTING CONDITIONS, THE SITE IS NOT COVERED IN WOODY VEGETATION NOR REGROWTH. IN ACCORDANCE WITH NEW JERSEY STANDARD FOR LAND GRADING (REVISED 2017), NON WOODY VEGETATED PA1 AREAS FALL UNDER THE SOIL COMPACTION EXEMPTION LIST AS A "URBAN REDEVELOPMENT" AND IS DEFINED BY NJDEP AS "PREVIOUSLY DEVELOPED".

NRCS SOIL DESCRIPTIONS		
SOIL	DESCRIPTION	HYDROLOGIC GROUP
USBNB	URBAN LAND, BOXTON SUBSTRATUM	B



SEE SHEET 13 OF 19 FOR SOIL EROSION NOTES



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TITLE: **SOIL EROSION AND SEDIMENT CONTROL PLAN**

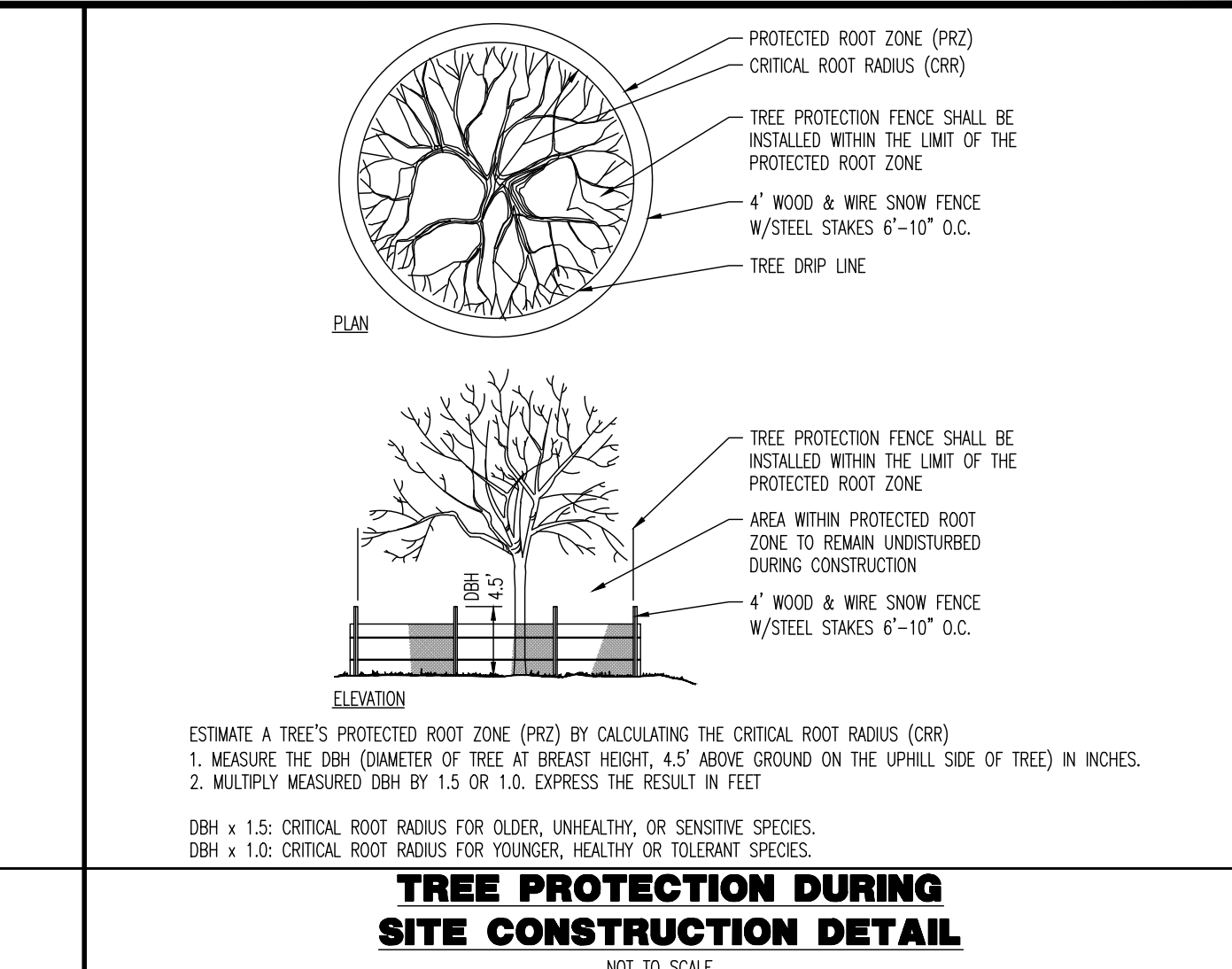
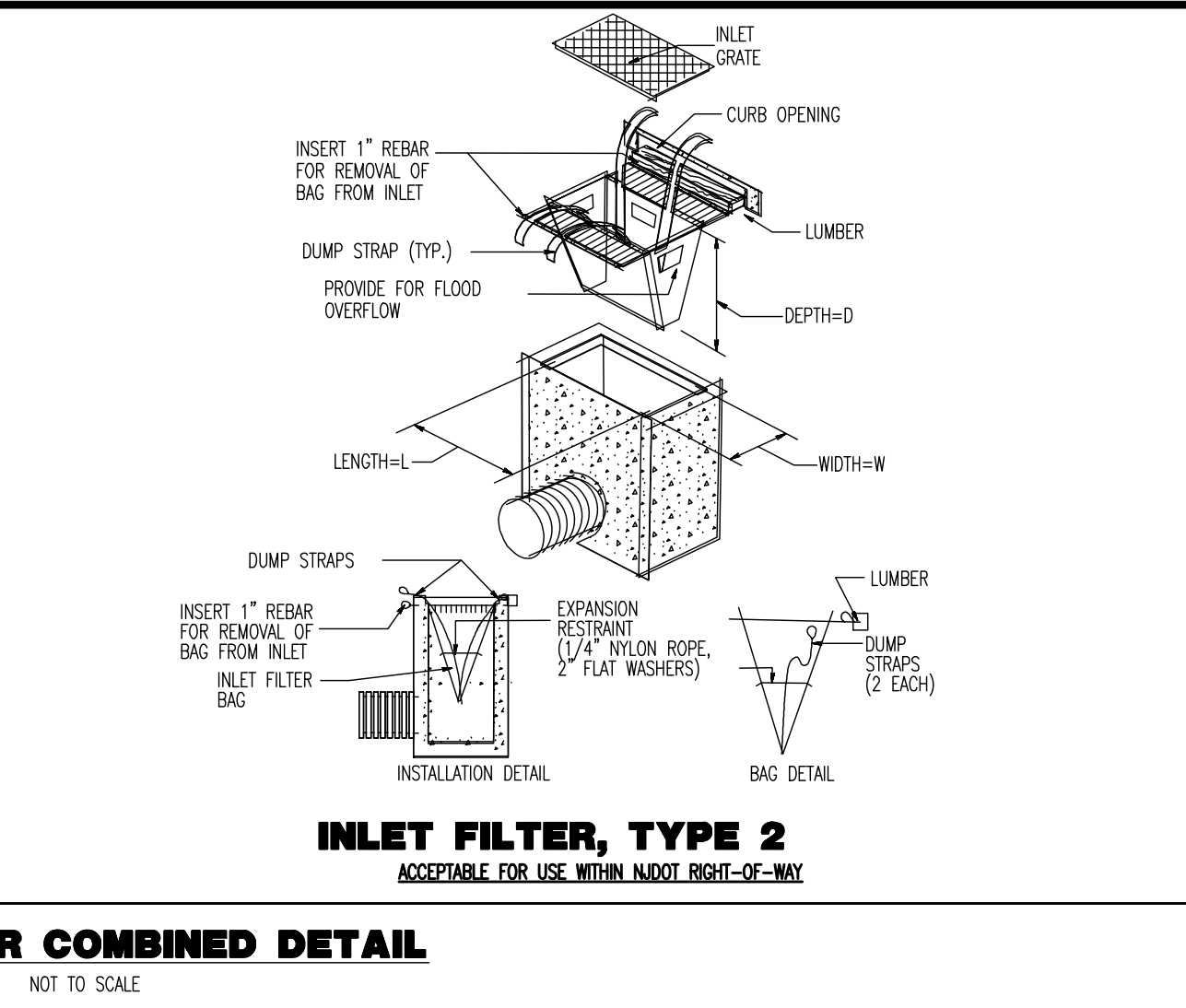
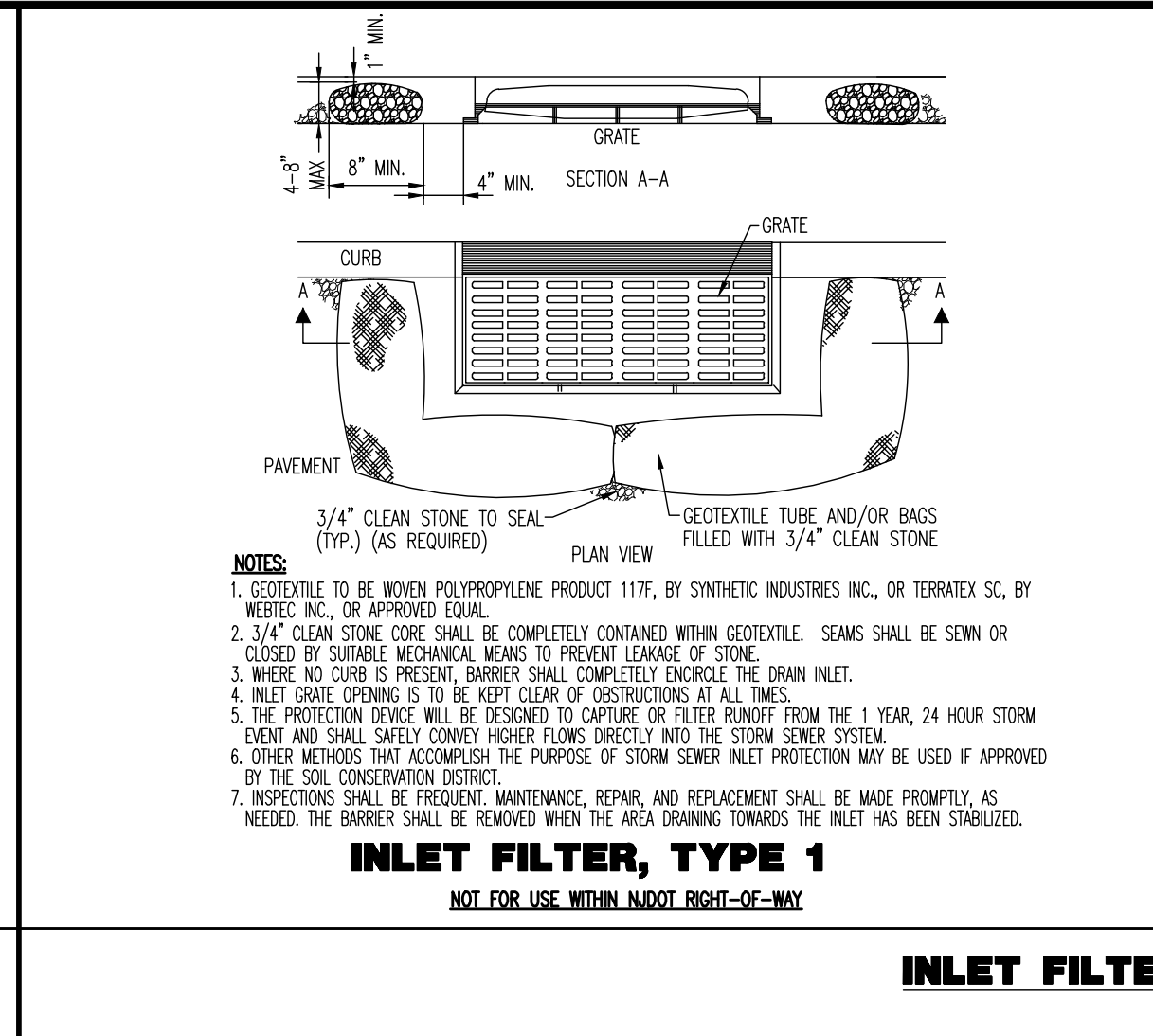
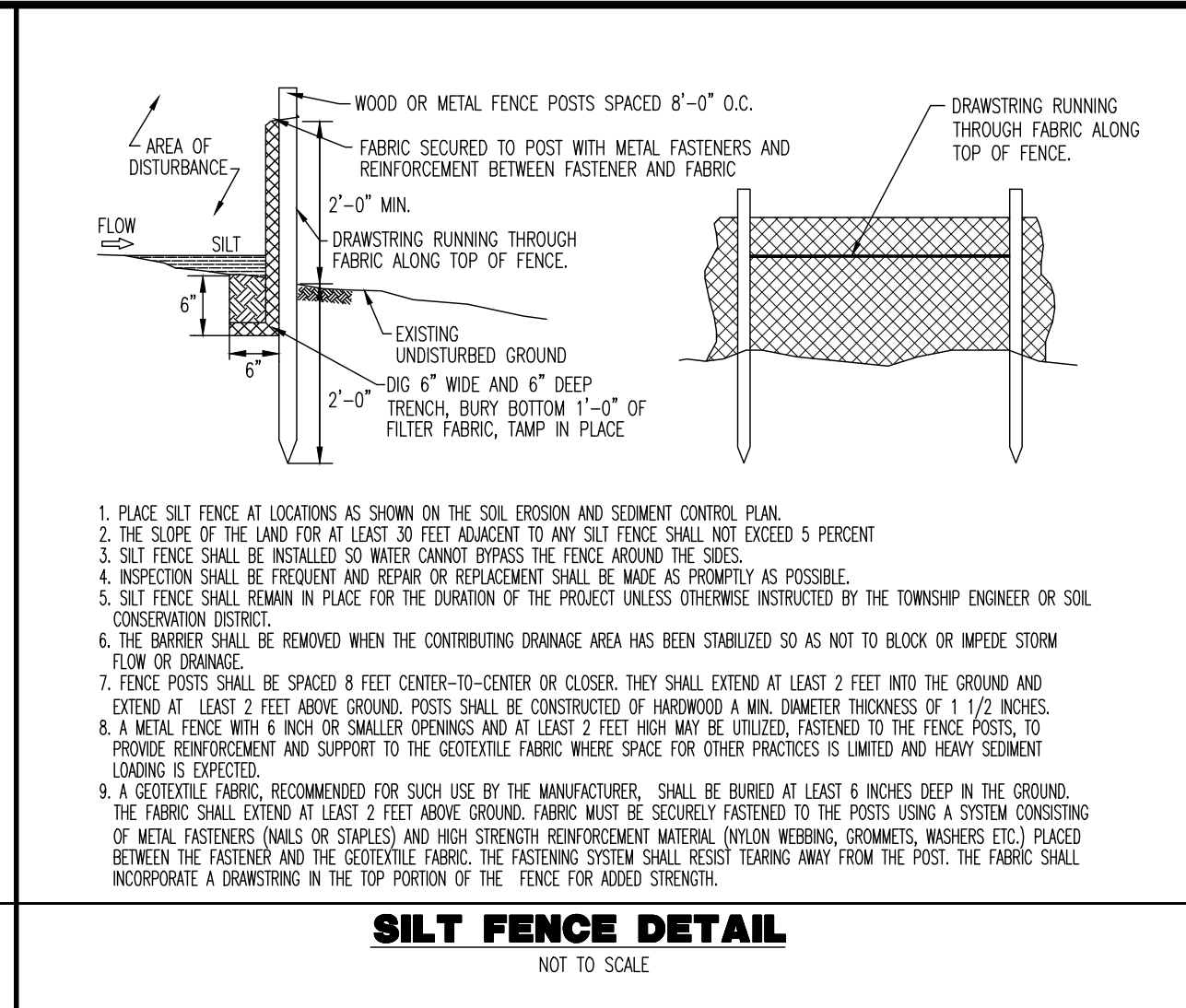
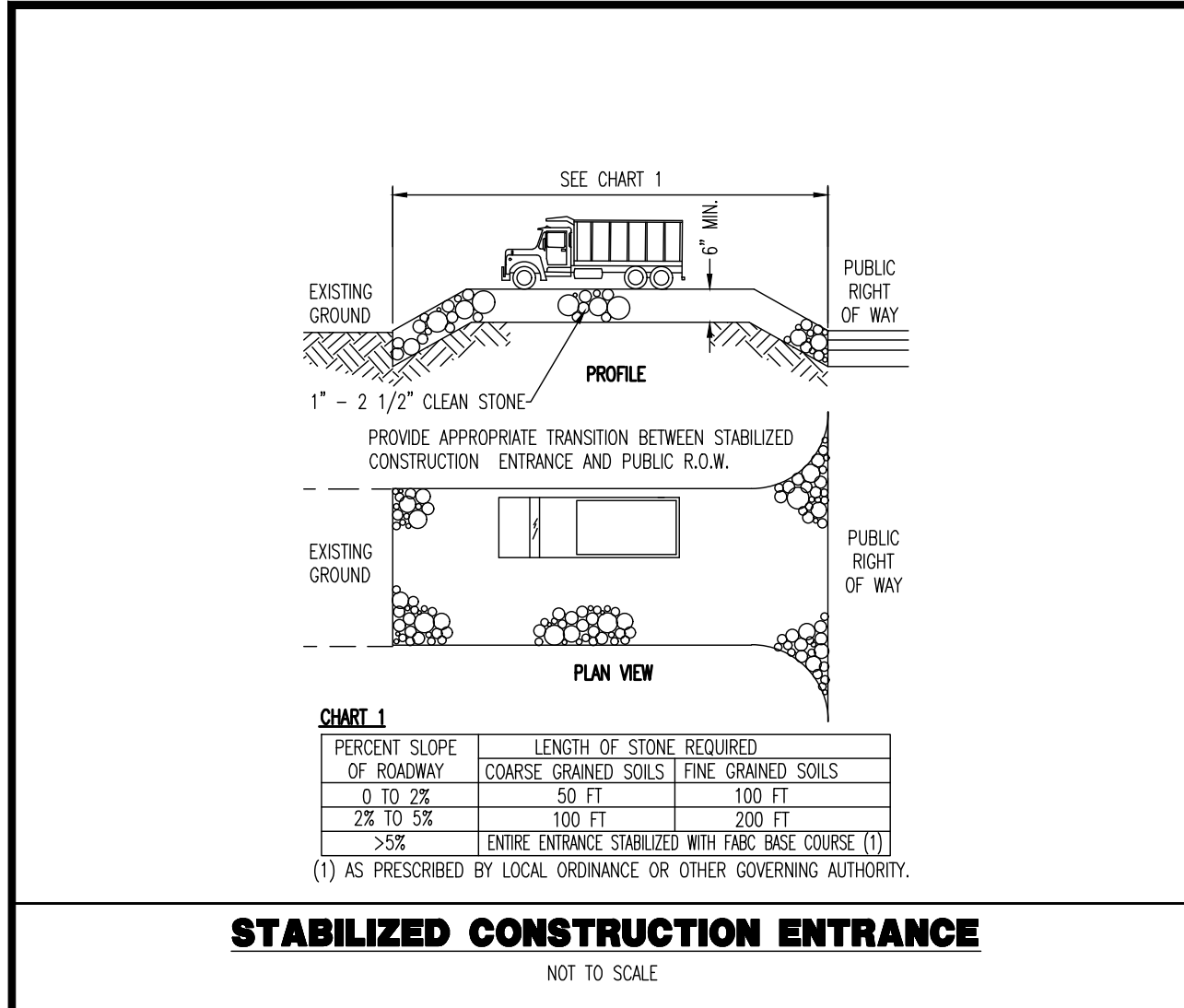
PROJECT: **MAVIS TIRE SUPPLY, LLC
PROPOSED AUTOMOTIVE SERVICE AND RETAIL CENTER**
BLOCK 105, LOT 64.01
460 PROSPECT AVENUE
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

DESIGNED BY: RPK
CHECKED BY: KED
DATE: 07/16/2025
SCALE: (H) 1"=20' (V)
SHEET No: **12** OF 19

RODMAN R. RITCHIE
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STANDARD FOR MAINTAINING VEGETATION

MAINTENANCE SHOULD OCCUR ON A REGULAR BASIS, CONSISTENT WITH FAVORABLE PLANT GROWTH, SOIL, AND CLIMATIC CONDITIONS. THIS INVOLVES REGULAR SEASONAL WORK FOR MOWING, FERTILIZING, LIMING, WATERING, PRUNING, FIRE CONTROL, WEED AND PEST CONTROL, RESEEDING, AND TIMELY REPAIRS. THE DEGREE OF PREVENTIVE MAINTENANCE NEEDED DEPENDS UPON THE TYPE OF VEGETATION AND ITS PROPOSED FUNCTION OR USE.

1. MOWING IS A RECURRING PRACTICE AND ITS INTENSITY DEPENDS UPON THE FUNCTION OF THE COVER. ON HIGH TO MODERATE AREAS (A) MAINTENANCE AREAS, SUCH AS LAWNS, CERTAIN RECREATION FIELDS, AND PICNIC AREAS, MOWING WILL BE FREQUENT (2 TO 7 DAYS INTERVALS) AND TYPICALLY AT A HEIGHT OF 2.5 TO 3 INCHES. RETURN CLIPPINGS FROM SOME TALLER MOWING TO THE TURF TO REDUCE THE AMOUNT OF FERTILIZER NEEDED TO MAINTAIN THE TURF BY AS MUCH AS 50%. SOME (MUCH MORE) MOWING WILL BE REQUIRED TO MAINTAIN TURF IN AREAS WHERE THERE IS A HIGH PERCENTAGE OF WEEDS OR OTHER PLANT MIXTURES) MOWINGS PER YEAR. MOWING OF NATURALIZED AREAS IS TYPICALLY DONE AT HEIGHTS NO LESS THAN 4 INCHES AND SHOULD NOT BE DONE BETWEEN APRIL FIRST AND JULY FIFTH TO AVOID DISTURBING GROUND NESTING BIRDS. THE LARGE AMOUNT OF CLIPPING DEBRIS GENERATED BY MOWING NATURALIZED AREAS WILL NEED TO BE REMOVED AWAY AND/OR DISPOSED SO THE VEGETATION IS NOT OVERLY BURIED. BURNING OF CLIPPINGS IS NOT RECOMMENDED TO MANAGE NATURALIZED TURFS. LOW MAINTENANCE AREAS (B) AREAS THAT ARE LEFT UNMOWN TO PERMIT NATURAL SUCCESSION.
2. INCORPORATION OF ORGANIC MATTER (FOR EXAMPLE, MADE COMPOST) INTO THE SOIL WILL SUBSTANTIALLY REDUCE THE NEED FOR FERTILIZER AND IRRIGATION INPUTS.
3. FERTILIZATION SHOULD BE APPLIED AS NEEDED TO MAINTAIN A DENSE STAND OF DESIRABLE SPECIES. FREQUENTLY MOWED AREAS AND THOSE ON SANDY SOILS WILL REQUIRE MORE FREQUENT FERTILIZATION BUT AT LOWER NUTRIENT RATES PER APPLICATION.
4. LIMING REQUIREMENT SHOULD BE DETERMINED BY SOIL TESTING EVERY 2 TO 3 YEARS. FERTILIZATION MAY INCREASE THE NEED FOR LIMING.
5. FERTILIZATION AND ADDITIONS OF OTHER SOIL AMENDMENTS ARE NOT RECOMMENDED FOR MANAGING NATIVE VEGETATION SUCH AS IN THE PINELAND NATURAL RESERVE.
6. MOWING SHOULD BE DONE WITHOUT ABUSIVE MOWING AND FROM INADEQUATE FERTILIZING AND LIMING. MANY NEWLY ESTABLISHED GRASSES WILL NOT SURVIVE IF MOWED AT HEIGHTS BELOW 2.5 INCHES AND AT INTERVALS GREATER THAN 7 DAYS. BRUSH INVASION IS A CONSEQUENCE OF LACK OF MOWING. THE NUMBER OF WEEDS OR BRUSH THAT CAN BE TOLERATED IN ANY VEGETATED AREA DEPENDS UPON THE INTENDED USE OF THE LAND. GRASSY AREAS ARE SUBJECT TO RAPID INVASION BY WEED AND WOODY PLANTS. BRUSH INVASION SHOULD BE MONITORED AND PREVENTED BY FREQUENT MOWING, CHEMICAL CONTROL OF WEEDS OR BRUSH, ACCOMPANIED BY USING HERBICIDES OR MECHANICAL METHODS.
7. FIRE HAZARD IS GREATER WHERE DRY VEGETATION HAS ACCUMULATED. THE TALLER THE VEGETATION, THE GREATER THE HAZARD. THE FIRE DANGER SHOULD BE MONITORED AND WHEN NECESSARY REMOVE UNDESIRABLE OR INVASIVE PLANTS TO MAINTAIN THE INTEGRITY OF THE LANDSCAPE AND ENHANCE QUALITY OF PERMANENT VEGETATIVE COVER.

STANDARD FOR PERMANENT STABILIZATION WITH SOD

METHODS AND MATERIALS

1. CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD. SPECIFY "CERTIFIED SOD," OR OTHER HIGH QUALITY CULTIVATED SOD.
2. SOD SHOULD BE FREE OF WEEDS AND UNDESIRABLE COARSE WEEDY GRASSES.
3. SOD SHOULD BE OF UNIFORM THICKNESS, APPROXIMATELY 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT TIME OF CUTTING. (EXCLUDES TOP GROWTH).
4. SOD SHOULD BE VIGOROUS AND DENSE AND BE ABLE TO REtain ITS OWN SHAPE AND WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP FROM THE UPPER 10 PERCENT OF THE STEM. BROKEN POTS OR TORN AND MOTTLED ENDS WILL NOT BE ACCEPTABLE.
5. 100 BRIGHT SHADE, A SOD OF KENTUCKY 31 TALL FESCUE AND BLUEGRASS IS PREFERRED OVER A STRAIGHT BLUEGRASS SOD.
6. ONLY MOST, FRESH UNWEEDY SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS.

I. SITE PREPARATION

- B. INSTALL NEEDED EROSION CONTROL PRACTICES AND FACILITIES, SUCH AS INTERCEPTOR DITCHES, DIKES AND TERRACES, EROSION STOPS, AND DE-SILTING BASINS. SEE STANDARDS 4.2 THROUGH 4.16.

II. SOIL PREPARATION

4. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE OFFERED BY RUTGERS UNIVERSITY SOIL TESTING LABORATORY. SOIL SAMPLE MATERIALS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT AVAILABLE, SMALL, 10-10-10 FERTILIZER CAN BE USED AT A RATE OF 10 POUNDS PER 1000 SQUARE FEET. 10-10-10 FERTILIZER SHOULD BE USED IN A RATIO OF 10 POUNDS PER ACR OR 11 POUNDS PER 1000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH EQUAL VOLUME INSOLUBLE NITROGEN AND INCORPORATED INTO THE SURFACE 4". IN ADDITION, 300 POUNDS 38-0-0 PER ACRE OR EQUIVALENT OF SLOW RELEASE NITROGEN MAY BE USED IN USE OF TOP-DRESSING. APPLY FERTILIZER NAME AS FOLLOWS:
- | SOIL TEXTURE | TONS/ACRE | LB/5-100 SQ. FT. |
|--|-----------|------------------|
| CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL | 3 | 135 |
| SANDY LOAM, LOAM, SILT LOAM, AND SILT | 2 | 90 |
| LOAMY SAND, SAND | 1 | 45 |
5. PULVERIZED DOLOMITE LIMESTONE IS PREFERRED FOR MOST SOILS SOUTH OF THE NEW BRUNSWICK-TRENTON LINE.
6. WORK LINE FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICABLE TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOW, CONTINUE, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR.
7. HARBOR, TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED.
8. REMOVE ALL DEBRIS FROM ALL OBJECTS THAT ARE NOT DESIRED TO REMAIN IN THE SOIL TO CONTACT AND REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE TRUNKS, PEETS OF CONCRETE, CLOUDS, LUMPS, OR OTHER UNSUITABLE MATERIAL.
9. INSPECT SITE BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RE-TILLED AND FIRMED AS NECESSARY.

III. SOD PLACEMENT

5. SOD STRIPS SHOULD BE LAID ON THE CONTOUR, NEVER UP AND DOWN THE SLOPE, STARTING AT THE BOTTOM OF THE SLOPE AND WORKING UP, ON STEEP SLOPES, THE USE OF LEADERS WILL FACILITATE THE WORK AND PREVENT DAMAGE TO THE SOD. DURING PLACEMENT, TEMPERATURE, LIGHTLY RAINING, AND WINDY CONDITIONS SHOULD BE AVOIDED.
6. PLACE SOD STRIPS WITH SUNK, EVEN JOINTS THAT ARE STAGGERED, OPEN SPACES INVITE EROSION.
7. ROUGH OR TAMP SOD IMMEDIATELY FOLLOWING PLACEMENT TO INSURE SOD CONTACT OF ROOT MAT AND SOIL SURFACE, DO NOT OVER TAMP SOD. ALL JOINTS SHOULD BE BUTTED TIGHTLY IN ORDER TO PREVENT WINDS WHICH WOULD CAUSE DRYING OF THE ROOTS.
8. SODS OF GREATER LENGTH, 1. SECURE SODS TO SURFACE SOIL, WITH WOOD PILES, WIRE STAPLES, OR SPIKE SHANKS (4" TO 6" INCHES LONG BY 3/4" INCH WIDE).
9. SURFACE WATER CANNOT ALWAYS BE DIVERTED FROM FLOWING OVER THE FACE OF THE SLOPE, BUT A CAPPING STRIP OF HEAVY DUTY PLASTIC NETTING CAN BE USED TO PREVENT WATER FROM FLOWING OVER THE FACE OF THE SLOPE.
10. AFTER LIFTING AND UNCOVERING OF SOD, THE SAME TECHNIQUE CAN BE USED TO ANCHOR SOD IN WATER CARRYING CHANNELS AND OTHER CRITICAL AREAS, WIRE STAPLES MUST BE USED TO ANCHOR NETTING IN CHANNEL WORK.
11. FOLLOWING FLOWING, INSTANTANEOUSLY STOP FLOWING TO PREVENT EROSION, PENETRATION OF THE SOIL LAYER BENEATH SOD TO DEPTHS OF 4 INCHES, MAINTAIN OPTIMUM MOISTURE FOR AT LEAST TWO WEEKS.

IV. TOP-DRESSING

- IF SLOW RELEASE NITROGEN IS USED IN ADDITION TO SUGGESTED FERTILIZER, THEN A FOLLOW-UP OF TOP DRESSING IS NOT NEEDED, EXCEPT WHERE GROSS NITROGEN DEFICIENCY EXISTS IN THE SOIL TO THE EXTENT THAT TURF FALLURE MAY DEVELOP.
- TOP-DRESS WITH 10-0-10 OR EQUIVALENT AT 400 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.
- ## STABILIZATION SPECIFICATIONS
- ### PERMANENT SEEDING:
- GENERAL SITE SEEDING MIX:
- | | | |
|--------------------|-------------|----------------------|
| HARD FESCUE | 75 LBS/ACRE | 2.1 LBS/1000 SQ.FT. |
| PERENNIAL RYEGRASS | 10 LBS/ACRE | 0.25 LBS/1000 SQ.FT. |
| KY. BLUEGRASS | 10 LBS/ACRE | 0.25 LBS/1000 SQ.FT. |
| WHITE CLOVER | 5 LBS/ACRE | 0.1 LBS/1000 SQ.FT. |
- PERMANENT STABILIZATION SPECIFICATIONS:
- MULCHING MULCH MATERIALS TO BE UNROTTED SMALL GRASS STRAW, HAY FREE OF SEEDS, OR SALT HAY AT THE RATE OF 1.5 TO 2 TONS PER ACRE OR 70 TO 90 POUNDS PER 1,000 SQ. FT. EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER THE RATE OF APPLICATION IS 3 TONS PER ACRE.
 - SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 85% OF SOIL SURFACE WILL BE COVERED.
 - MULCH ANCHORING TO BE DONE IMMEDIATELY AFTER PLACEMENT BY ONE OF THE FOLLOWING METHODS:
 - PEG AND TWINE
 - MULCH NETTING
 - LIQUID MULCH-BINDERS
 - CRIMPER (MULCH ANCHORING COUNTER TOOL.)

STANDARD FOR 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 SUGGEST 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, TO MEET ACCEPTANCE CRITERIA.**
- D. INSTALL NEEDED EROSION CONTROL PRACTICES FOR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.**
- 2. SEEDING PREPARATION**
- A. UNIFORMLY APPLY 500 POUNDS LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-to-10 inch 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 INTO THE SURFACE, THE DATE 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 LINE AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL, TO A DEPTH OF 4 INCHES WITH DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR, CONTROLLED RAKE LINE, OR A LINE OF THE GENERAL CONTOUR (AS PREPARED).**
- C. HIGH ACID PRODUCING SOILS SUCH 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**
- A. SELECT A MIXTURE FROM TABLE 4-3 OR USE A MIXTURE RECOMMENDED BY RUTGERS COOPERATIVE EXTENSION OR NATURAL RESOURCES CONSERVATION SERVICE WHICH IS APPROVED BY THE SOIL CONSERVATION DISTRICT. 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.**
- B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTRIPACKER SEEDER. EXCEPT FOR DRILL, HYDROSEEDER OR CULTRIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDING. SEEDING SHALL BE TO A DEPTH OF 1/4 TO 1/2 INCH, BY BAKING OR DRAGGING. THE DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE-TEXTURED SOILS.**
- C. AFTER SEEDING, FIRING 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 WILL BE MAINTAINED.**
- 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. SHORFTERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. SEED SHOULD BE APPLIED TO A DEPTH OF 1/4 INCH. HYDROSEEDING IS A PREFERRED 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**
- A. 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.**
- B. STRAW OR HAY, UNHAYED SMALL GRASS STRAW, HAY FREE OF SEEDS, TO BE APPLIED AT THE RATE OF 1-1 1/2 TO 2 TONS PER ACRE TO 2 TONS PER ACRE. MULCHING IS REQUIRED EXCEPT THAT CRACK ORBGRASS IS USED INSTEAD OF A 1-1/2 TO 2 TONS PER ACRE MULCH (TACKIFYING OR ADHESIVE AGENT). THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOCKS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FIRE 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 THE 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.

2. MULCH NETTINGS.
 3. CRUMPER MULCH ANCHORING TOOL.
 4. LIQUID MULCH-BINDERS
- B. WOOD-FIBER OR PAPER-FIBER MULCH - SHALL BE MADE FROM WOOD, PLANT FIBER OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, APPLIED 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 BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.
- C. PELLETED 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, FORM A MULCH. MULCH PELLETTED 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 TO 75 LBS/1,000 SQUARE FEET AND ANCHORED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR REVEGETATION AREAS, SEEDED AREAS WHERE 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 STRAW MULCH AND TACKIFIER AGENT ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ANCHORING AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.
5. IRRIGATION
- F. SOIL MOISTURE IS DEPENDENT UPON 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. TOPDRESSING
- SINCE SOIL ORGANIC MATTER CONTENT AND SLOW-RELEASE NITROGEN FERTILIZER (WATER INSOLUBLE) ARE PRESCRIBED IN SECTION 2A - SEEDBED PREPARATION IN THIS STANDARD, NO FOLLOW-UP OF TOPDRESSING IS MANDATORY. AN EXCEPTION MAY BE MADE WHEN GROSS NITROGEN DEFICIENCY EXISTS IN THE SOIL TO THE EXTENT THAT TURF FALLOW MAY DEVELOP. IN THAT INSTANCE, TOPDRESS WITH 10 TO 20 POUNDS PER 1,000 SQUARE FEET OF 10-0-0 POUNDS PER 1,000 SQUARE FEET EVERY 3 TO 5 WEEKS UNTIL THE GROSS NITROGEN DEFICIENCY IN THE TURF IS AMELIORATED.

7. ESTABLISHING PERMANENT VEGETATION 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 THE 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.

MULCH STABILIZATION

- A. UNROTTED SLAW-GRASS STRAW, OR SALT HAY AT 2.0 TO 2.5 TONS PER ACRE IS SPREAD UNIFORMLY AT 90 TO 110 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH-BINDERS, OR NETTING (SEE NOTE 1). MATERIALS MAY BE APPLIED IF APPROVED BY THE SOIL CONSERVATION SERVICE.
- B. ASPHALT EMULSION IS RECOMMENDED AT THE RATE OF 600 TO 1,200 GALLONS PER ACRE. THIS IS SUITABLE FOR A LIMITED PERIOD OF TIME WHERE TRAVEL BY PEOPLE, ANIMALS, OR MACHINES IS NOT A PROBLEM.
- C. SYNTHETIC OR ORGANIC SOLID 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 RECOMMENDATIONS) MAY BE APPLIED BY A HYDROSEEDER.
- E. MULCH NETTING, SUCH AS PAPER, JUTE, EXCELOR, COTTON, OR PLASTIC, MAYBE USED.
- F. WOOD CHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED EXCEPT IN AREAS OF FLOWING WATER.
- G. GRAVEL OR CRUSHED STONE OR SLAG AT RATE OF 9 CUBIC YARDS PER 1,000 SQ. FT. AT DEPTH OF 3 INCHES.
- H. MULCH ANCHORING TO BE DONE IMMEDIATELY AFTER PLACEMENT BY ONE OF THE FOLLOWING METHODS:
- (1) PEG AND TWINE
 - (2) MULCH NETTING
 - (3) LIQUID MULCH-BINDERS
 - (4) CRIMPER (MULCH ANCHORING COULTER TOOL)

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, REDUCE ON-AND OFF- SITE DAMAGE AND HEALTH HAZARDS, AND IMPROVE TRAFFIC SAFETY.
 WHERE APPLICABLE - THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST:

VEGETATIVE COVER, PERMANENT VEGETATIVE COVER, AND PERMANENT STABILIZATION WITH SOIL SPRAY-ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON ROCK SOILS; TRAFFIC OFF THESE AREAS).			
	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
ANIONIC ASPHALT	7:1	COARSE SPRAY	1,200
EMULSION			
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300

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

SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

BARRIERS - SOLD BOARD FENCES, SNOW FENCES, BURGLAR FENCES, GRADE WALLS, BAKES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL EROSION.

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

STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

SOIL EROSION & SEDIMENT CONTROL NOTES

SOIL EROSION & SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THIS PLAN WILL BE CONSTRUCTED IN ACCORDANCE WITH THE "NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL" 7TH EDITION LAST REVISED JULY 2017, EFFECTIVE DECEMBER 2017. THESE PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
2. SOIL TO BE EXPOSED OR STOCKPILED FOR A PERIOD OF GREATER THAN 14 DAYS, AND NOT UNDER ACTIVE CONSTRUCTION, MAY BE REQUIRED TO BE TEMPORARILY MULCHED, SEEDED OR OTHERWISE PROVIDED WITH VEGETATIVE COVER AS PER APPENDIX A.3. THIS TEMPORARY COVER SHALL BE MAINTAINED UNTIL THE TIME WHEREBY PERMANENT REVEGETATION IS ESTABLISHED.
3. SEEDING DATES: THE FOLLOWING SEEDING DATES ARE RECOMMENDED TO BEST ESTABLISH PERMANENT VEGETATIVE COVER WITHIN MOST LOCATIONS IN THE HEPSCD SPRING - 3/15-5/15 AND FALL - 8/15 - 10/1
4. SEDIMENT FENCES ARE TO BE PROPERLY TRENCHED AND MAINTAINED UNTIL PERMANENT VEGETATIVE COVER IS ESTABLISHED
5. ALL STORM DRAINAGE INLETS SHALL BE PROTECTED BY ONE OF THE PRACTICES ACCEPTED IN THE STANDARDS, AND PROTECTION SHALL REMAIN UNTIL PERMANENT STABILIZATION HAS BEEN ESTABLISHED. STORM DRAINAGE OUTLET POINTS SHALL BE PROTECTED AS REQUIRED BEFORE THEY BECOME FUNCTIONAL.
6. MULCH MATERIALS SHALL BE UN-ROTTED SMALL GRAM STRAW APPLIED AT THE RATE OF 70 TO 90 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOLL, LIQUID MULCH BINDERS, OR NETTING THE DOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT.
7. ALL EROSION CONTROL DEVICES SHALL BE PERIODICALLY INSPECTED, MAINTAINED AND CORRECTED BY THE CONTRACTOR. ANY DAMAGE INCURRED BY EROSION SHALL BE RECTIFIED IMMEDIATELY.
8. THE HUDSON-ESSEX-PASSAIC SOIL CONSERVATION DISTRICT WILL BE NOTIFIED IN WRITING AT LEAST 48 HOURS PRIOR TO ANY SOIL DISTURBING ACTIVITIES. FAX - (862) 333-4507 OR EMAIL - INFORMATION@HEPSCD.ORG
9. THE APPLICANT MUST OBTAIN A CERTIFICATE ISSUED BEFORE-OF-COMPLIANCE PRIOR TO APPLYING FOR THE CERTIFICATE OF OCCUPANCY OR TEMPORARY CERTIFICATE OF OCCUPANCY FROM THE RESPECTIVE MUNICIPALITY, N.J. DCA OR ANY OTHER CONTROLLING AGENCY. CONTACT THE DISTRICT AT 862-333-4505 TO REQUEST A FINAL INSPECTION. WHEN ADVANCED NOTICE UPON COMPLETION OF THE REVEGETATION MEASURES OR PERFORMANCE BEFORE MAY BE POSTED WITH THE DISTRICT WHEN ADVERSE WEATHER OR SNOW COVER PROHIBITS THE PROPER APPLICATION OF SEED, MULCH, FERTILIZER OR HYDRO-SEED.
10. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES. DO NOT UTILIZE A FIRE OR GARDEN HOSE TO CLEAN ROADS UNLESS THE RUTTING IS DIRECTIONED TO A PROPERLY DESIGNED AND FUNCTIONING SEDIMENT BASIN. WATER PUMPED OUT OF THE EXCAVATED AREAS CONTAINS SEDIMENTS THAT MUST BE REMOVED PRIOR TO DISCHARGING TO RECEIVING BODIES OF WATER USING REMOVABLE PUMPING STATIONS, SLUMP PITS, PORTABLE SEDIMENTATION TANKS AND/OR SILT CONTROL BASINS.
11. ALL SURFACES HAVING LAWN OR LANDSCAPING AS FINAL COVER ARE TO BE PROVIDED TOPSOIL PRIOR TO RE-SEEDING, SOODOING OR PLANTING. A DEPTH OF 5.0 INCHES, FIRMED IN PLACE, IS REQUIRED, AS PER THE STANDARDS FOR TOPSOILING AND LAND GRADING. EROSION PREVENTION 2017.
12. ALL PLAN REVISIONS MUST BE SUBMITTED TO THE DISTRICT FOR PROPER REVIEW AND APPROVAL.
13. A CRUSHED STONE, WHEEL CLEANING TRACKING-PAD IS TO BE INSTALLED AT ALL SITE EXITS USING 2 1/2" -1" CRUSHED ANGULAR STONE (ASTM 2 OR 3) TO A MINIMUM LENGTH OF 50 FEET AND MINIMUM DEPTH OF 6". ALL DRIVEWAYS MUST BE PROVIDED WITH CRUSHED STONE UNTIL PAVING IS COMPLETE.
14. STEEP SLOPES INCURRING DISTURBANCE MAY REQUIRE ADDITIONAL STABILIZATION MEASURES, THESE "SPECIAL" MEASURES SHALL BE APPROVED BY THE APPLICANT'S ENGINEER AND BE APPROVED BY THE SOIL CONSERVATION DISTRICT.
15. THE HUDSON-ESSEX-PASSAIC SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED, IN WRITING, FOR THE SALE OF ANY PORTION OF THE PROPERTY OR FOR THE SALE OF INDIVIDUAL LOTS. NEW OWNERS' INFORMATION SHALL BE PROVIDED. ADDITIONAL MEASURES DETERMINED NECESSARY BY DISTRICT OFFICIALS SHALL BE IMPLEMENTED AS CONDITIONS, WARRANT.

STANDARD FOR DEWATERING

7. REMOVABLE PUMPING STATIONS ARE USED WHEN LONG DURATIONS OF PUMPING ARE REQUIRED. THE NUMBER OF REMOVABLE STATIONS ON THE PLANS: PUMP WATERED FROM THE STATION SHALL BE DISCHARGED INTO A SEDIMENT BASIN OR SUITABLE FILTER AREA.
8. A SUCTION HOSE FROM THE PUMP SHALL BE PLACED INSIDE THE INNER PIPE TO BEGIN DOWNGRADE: THE DISCHARGE HOSE SHALL BE PLACED OUTSIDE OF THE STATION AND BE SECURED TO THE PUMP.
9. MAINTENANCE: THE INNER PIPE CAN EASILY BE REMOVED TO FACILITATE CHANGING THE GEOTEXTILE WHEN IT CLOGS. MAINTENANCE RUNS DRY AND BACKED UP WATER REMAINS.
10. SLOPE PROTECTION: THE PUMP STATION IS USED TO REMOVE EXCESS WATER WHILE MINIMIZING SEDIMENTATION. THE NUMBER OF SLOPE PROTECTION PITS: PITS MAY BE RELOCATED TO OPTIMIZE USE BUT DISCHARGE LOCATION CHANGES MUST BE COORDINATED WITH PERFORATED VERTICAL STANDPIPE IS WRAPPED WITH "2" HARDWARE CLOTH AND GEOTEXTILE FABRIC THEN PLACED IN THE CENTER OF AN AREA WITH FILTER MATERIAL CONSISTING OF ANYTHING FROM CLEAN GRAVEL (MINIMUM FINE) TO ASM C 33 STONE (1/2" MAXIMUM DRAINAGE) OR SAND (MINIMUM 20% FINE). THE PITS ARE USED TO REMOVE EXCESS WATER WHILE MINIMIZING SEDIMENTATION.
11. SEDIMENT TANK / SILT COLLECTOR BAGS ARE CONTAINERS THROUGH WHICH SEDIMENT LAKEN WATER IS PUMPED TO TRAP AND RETAIN THE SEDIMENT TANK BAG IS TO BE USED ON SITES WHERE EXCAVATIONS ARE DEEP, AND SPACE IS LIMITED AND WHERE DIRECT DISCHARGE OF SEDIMENTATION SYSTEMS IS TO BE AVOIDED.
12. CONSTRUCTION SPECIFICATIONS:
- a. LOCATION. CONTAINERS (TANKS OR BAGS) SHALL BE LOCATED FOR EASE OF CLEAN-OUT AND DISPOSAL OF THE TRAPPED WITH CONSTRUCTION ACTIVITIES AND PEDESTRIAN TRAFFIC. BAGS SHALL NOT BE PLACED DIRECTLY INTO RECEIVING WATERS.
- b. SIZE. THE SIZE OF THE CONTAINER SHALL BE DETERMINED BY THE VOLUME OF SEDIMENT TO BE REMOVED. THE PUMP: 15 MINUTE OF PUMP DISCHARGE CAPACITY. TYPICAL TANK CONFIGURATION IS SHOWN ON PAGE 14-3. TANKS MAY BE CON-
- c. EFFECTIVENESS.
13. THE TANK CONSIST OF TWO CONCENTRIC CIRCULAR PIPES (CMP), ATTACHED TO A WATERPROOF BASEPATE. THE INNER CMP IS CENTERS AND IS WRAPPED WITH GEOTEXTILE AND HARDWARE CLOTH. PUMPED WATER IS DISCHARGED INTO THE INNER CMP AND GEOTEXTILE INTO THE SPACE BETWEEN THE TWO CMP'S. A DISCHARGE LINE IS ATTACHED TO THE OUTER CMP AND DRAIN BETWEEN THE TWO CONCENTRIC CMP'S. THE DISCHARGE LINE MAY BE CONNECTED TO ANOTHER TANK WHERE IT DRAINS INTO A SERIES CONNECTIVE MAY BE CONNECTED IN SERIES.
14. SEDIMENT TANK BAGS MUST BE LOCATED AWAY FROM RECEIVING WATER AND DISPOSED OF ACCORDING TO MANUFACTURER COMBINED WITH TEMPORARY FILLS (ITEM 4, FOLLOWING) FOR ENHANCED FILTRATION.
15. TEMPORARY FILTERS FOR SMALL IMPROVEMENTS: FOR SMALL QUANTITIES OF PONDED WATER SUCH AS MAY BE FOUND IN SHALLOW EROSION INSTALLATIONS, A TEMPORARY FILTER MAY BE CONSTRUCTED OF SAND, CLEAN SMALL STONE AND FILTER QUANTITIES OF TRAPPED SURFACE WATER (PUMPING OF WELL PONTS IS EXCLUDED FROM THIS STANDARD) AND WHERE SEDIMENTS ARE

STANDARD FOR TOPSOILING

3. MATERIALS
- A. TOPSOIL SHOULD BE FRAGILE, LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES, AND CONTAIN NO TOXIC SUBSTANCES. TO AVOID EXCESSIVE CHLORINE, PHOSPHORUS, OR OTHER CHEMICALS THAT MAY BE HARMFUL TO PLANT GROWTH, SOLUBLE SALTS SHOULD NOT BE EXCESSIVE (CONCENTRATION LESS THAN 0.5 MILLIMOLES PER CENTIMETER. MORE THAN 0.5 MILLIMOLES MAY CAUSE DEADLY SEEDLINGS AND ADVERSELY IMPACT GROWTH). IMPORTED TOPSOIL SHALL HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.75 PERCENT. ORGANIC MATTER CONTENT MAY BE BASED BY ADDITIVES.
- B. TOPSOIL SUBSTITUTES ARE 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 LEVELS.
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. TOPSOIL 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 THE STANDARDS PREVIOUSLY DESCRIBED HEREIN. SEE STANDARDS FOR PERMANENT (PG-4.1) OR TEMPORARY (PG-2.1) 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 METHOD TO MINIMIZE THE DURATION OF 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 SEEDING PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.
- C. SOIL TESTS FOR IDEAL PH FOR SEEDING 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 PRACTICABLE TO A DEPTH OF 4 INCHES.
- D. PRIOR TO TOPSOILING, THE SUBSOIL SHALL BE IN COMPLIANCE WITH THE STANDARD FOR LAND GRADING.
- E. PRIOR TO NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENTATION BASINS, AND WATERWAYS.
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.
- B. A UNIFORM APPLICATION TO AN AVERAGE DEPTH OF 5.0 INCHES, MINIMUM OF 4 INCHES, FIRMED IN PLACE, IS REQUIRED.
- C. 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 SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF TOPSOIL WITH A PH OF 5.0 OR MORE.
- 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 RECOVERS 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 (IE COMPOST) AS A TOP DRESSING.

SEQUENCE OF CONSTRUCTION:

PHASE 1: INSTALL STONE ANTI-TRACKING PAD AND OTHER SOIL EROSION SEDIMENT CONTROL MEASURES INCLUDING DOWN SLOPE PERMITTER BALES AND SILT FENCING. (1 DAY)

PHASE 2: CLEAR AND ROUGH GRADE FOR NEW BUILDING SITE AND OTHER STRUCTURES REQUIRING EXCAVATION. (2 WEEKS)

PHASE 3: EXCAVATE AND INSTALL UNDERGROUND PIPING AND DRAINAGE STRUCTURES. (3 WEEKS)

PHASE 4: EXCAVATE BUILDING FOUNDATION (1 WEEK)

PHASE 5: COMPLETE BUILDING CONSTRUCTION. (4 WEEKS)

PHASE 6: EXCAVATE AND INSTALL ON SITE IMPROVEMENTS INCLUDING CURBS. (3 WEEKS)

PHASE 7: FINAL GRADE SITE (1 WEEK)

PHASE 8: INSTALL PAVING, CONCRETE, AND FINAL VEGETATION INCLUDING SEEDING AND LANDSCAPING. (2 WEEKS)

PHASE 9: EXCAVATE ALL SOIL EROSION SEDIMENT CONTROL MEASURES INCLUDING PERMITTER BALE AND SILT FENCING AND REMOVE ALL PAVING, CONCRETE, AND FINAL VEGETATION INCLUDING SEEDING AND LANDSCAPING. (1 DAY)

STABILIZATION SPECIFICATIONS - TEMPORARY SEEDING AND MULCHING:

- PRIOR TO SEEDING, MIX TOP 6" LAYER OF TOPSOIL WITH FERTILIZER AND LIME.
- LIMESTONE - 2 TONS/ ACRE UNLESS SOIL TESTING INDICATES OTHERWISE.
- FERTILIZER - 500 LBS/ ACRE OR 11 LBS/ 1000 SF OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE.
- SEEDS:
- o COOL SEASON:
 - PERENNIAL RYE GRASS 100LBS/ACRE OR OTHER APPROVED SEEDS; PLANT BETWEEN APRIL 30 AND MAY 15 OR BETWEEN AUGUST 15 AND OCTOBER 15.
- o WARM SEASON:
 - FLAT PEA AT 25 LBS/AC. OR OTHER APPROVED SEEDS; PLANT BETWEEN MAY 1 AND AUGUST 14.
- MULCH - UNFERTILIZED SMALL GRASS STRAW, FREE OF SEEDS, OR SALT HAY AT A RATE OF 1.5-2 TONS PER ACRE 70 TO 90 LBS/1,000 SQ. FT. OF SEEDING AREA. MULCH SHALL BE SECURED BY APPROVED METHODS (I.E. PEG AND TWINE, MULCH NETTING, LIQUID MULCH BINDER, OR CRUMPER

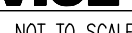
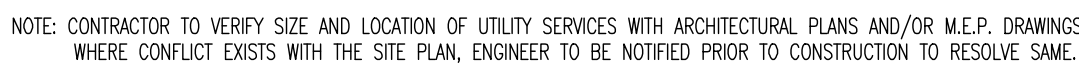
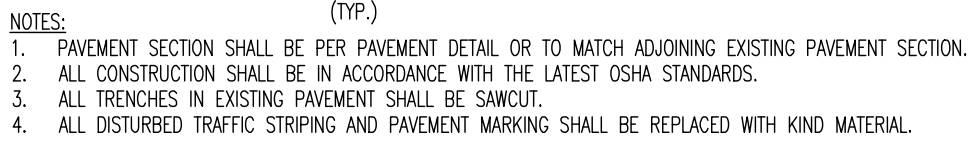
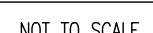
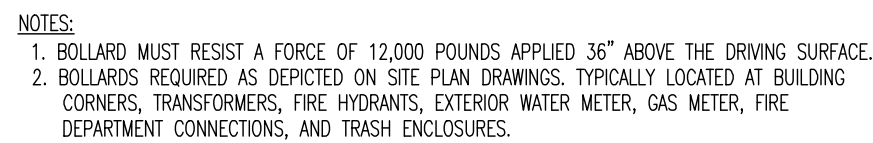
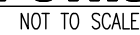
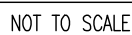
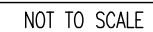
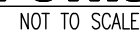
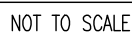
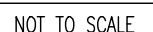
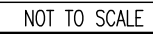
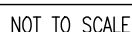
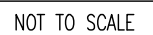
TITLE: **SOIL EROSION AND SEDIMENT CONTROL NOTES & DETAILS**

PROJECT: MAVIS TIRE SUPPLY, LLC <i>MAVISED AUTOMOTIVE SERVICE AND RETAIL CENTER</i> BLOCK 105, LOT 64.01 460 PROSPECT AVENUE TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY	JOB NO: 1956-24-04187	DATE: 07/16/2025
	DRAWN BY: AMN CHECKED BY: KED DESIGNED BY: RRR CHECKED BY: ---	SCALE: (H) NOT TO (V) SCALE SHEET No:
RODMAN R. RITCHIE  PROFESSIONAL ENGINEER NEW JERSEY LICENSE NO. 43547	MARLA A. ROLLER LICENSED LANDSCAPE ARCHITECT NEW JERSEY LICENSE NO. 21AS000053700	13 OF 19

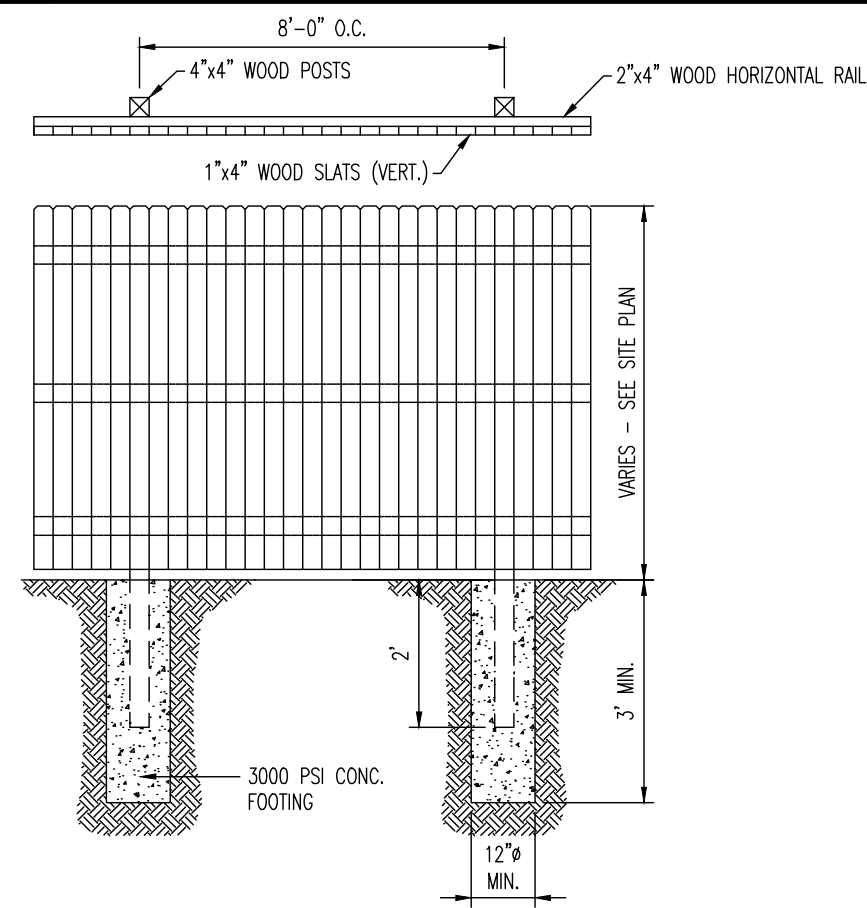


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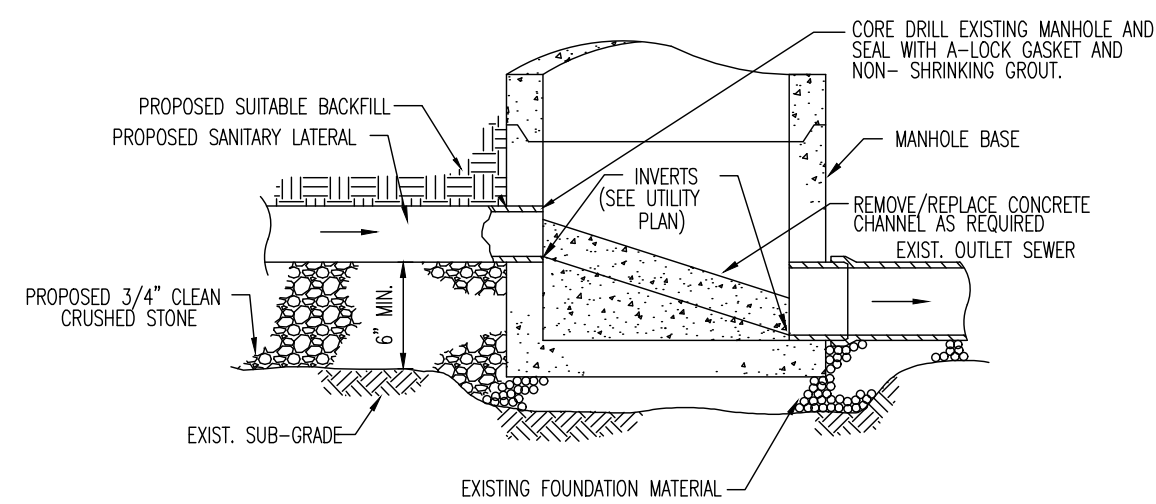
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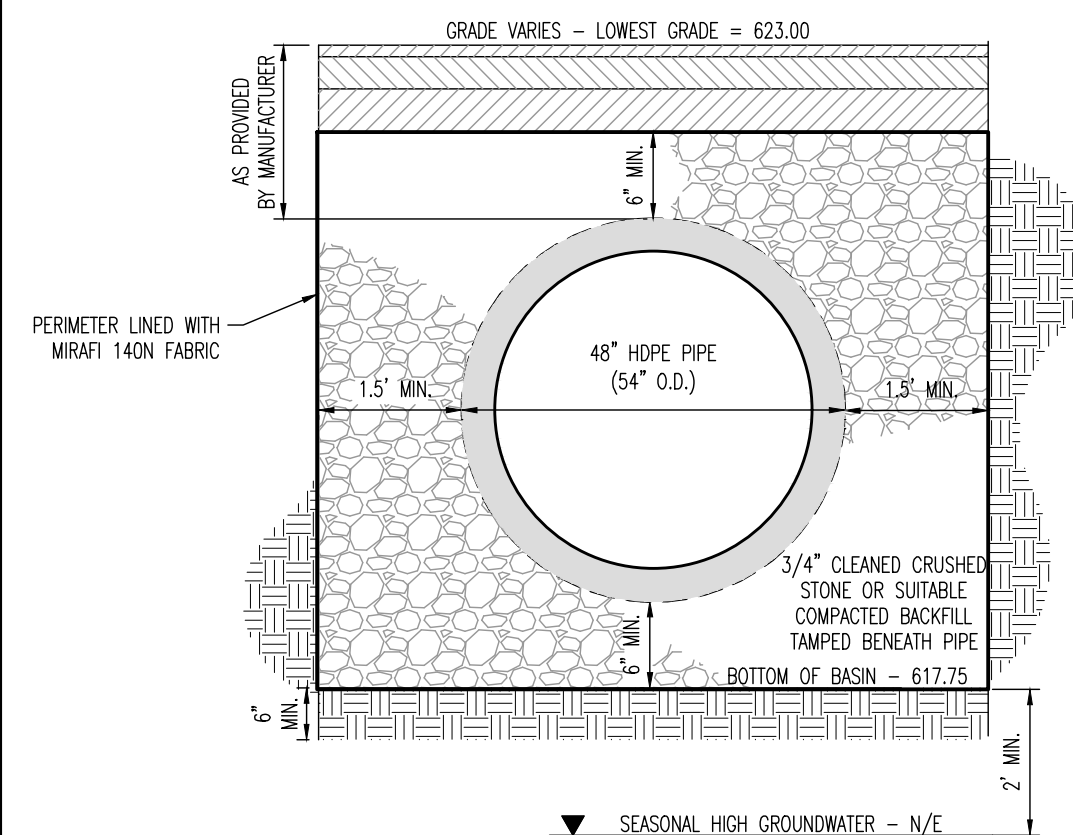
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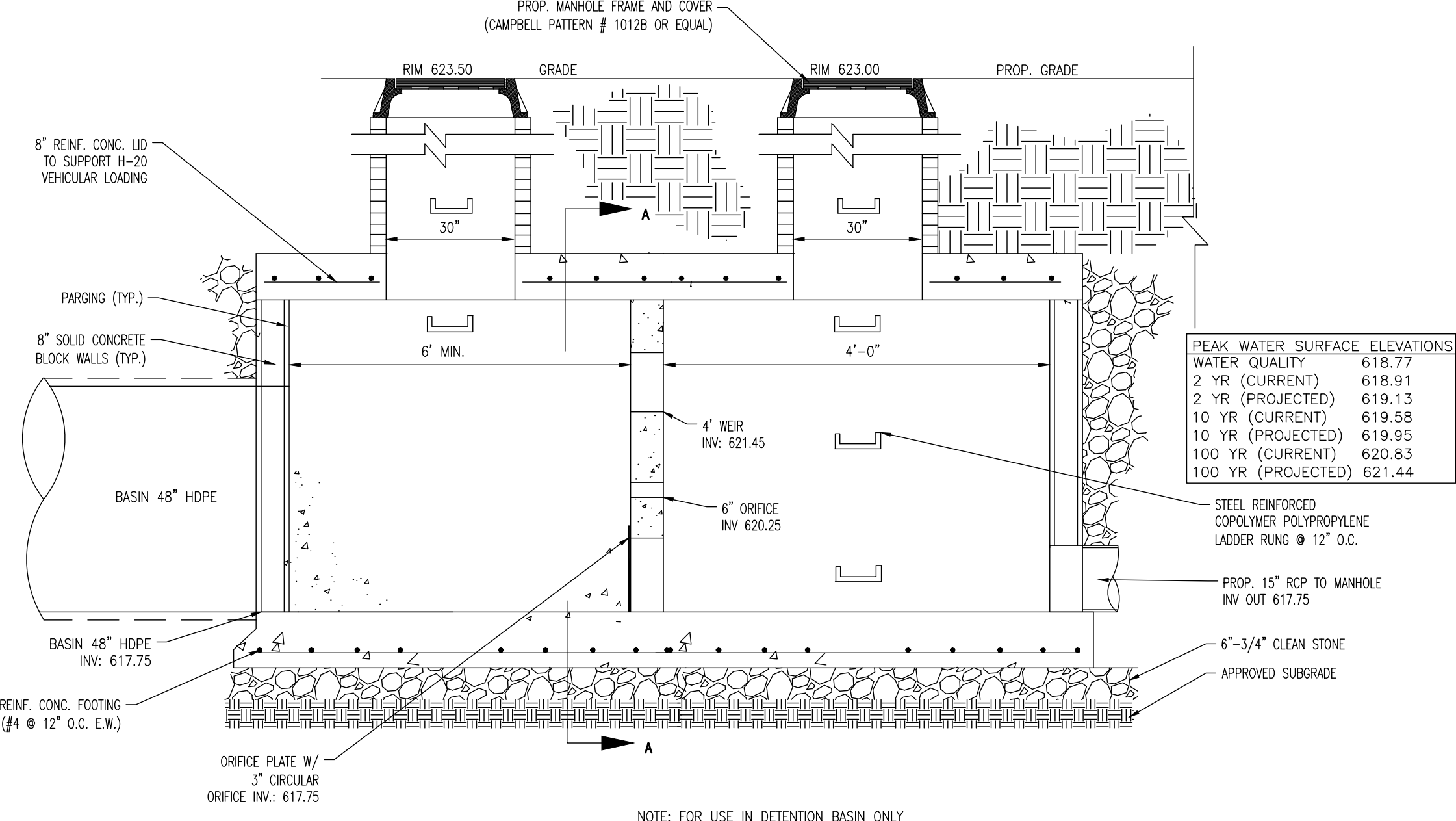
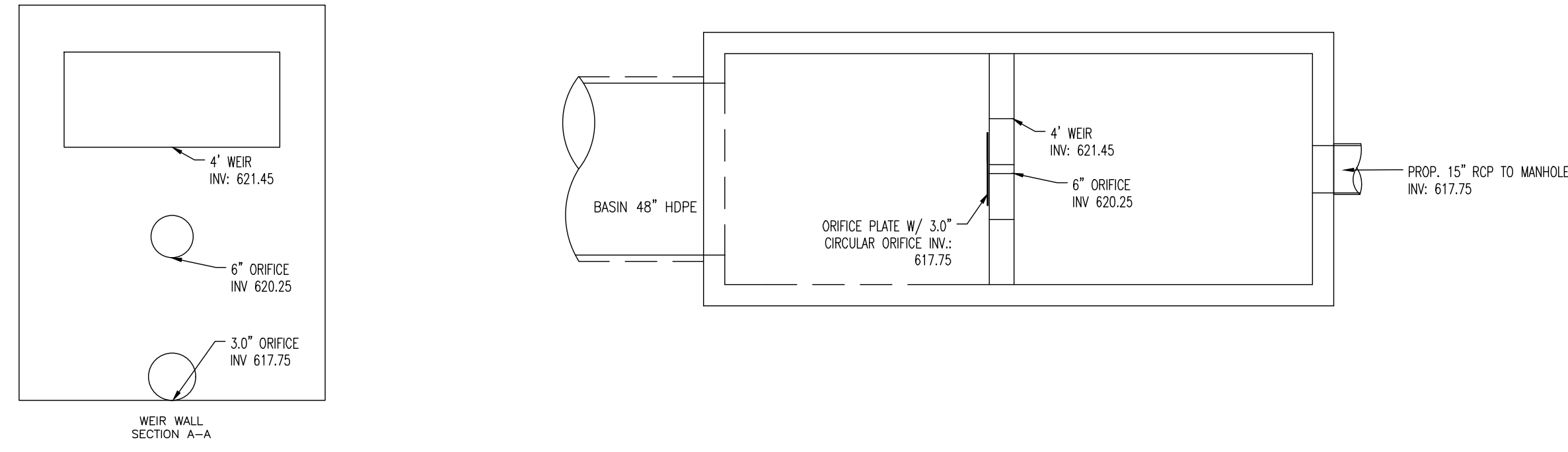
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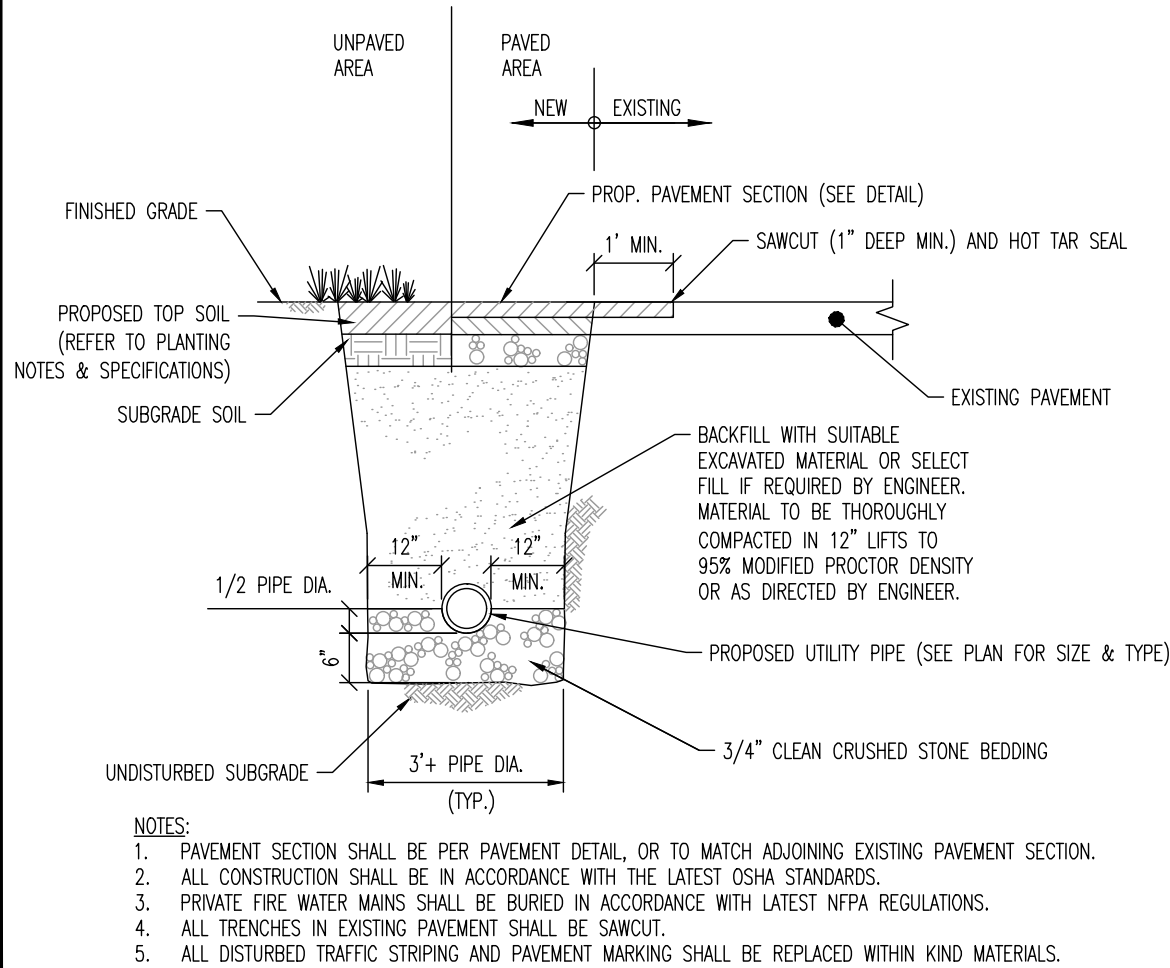
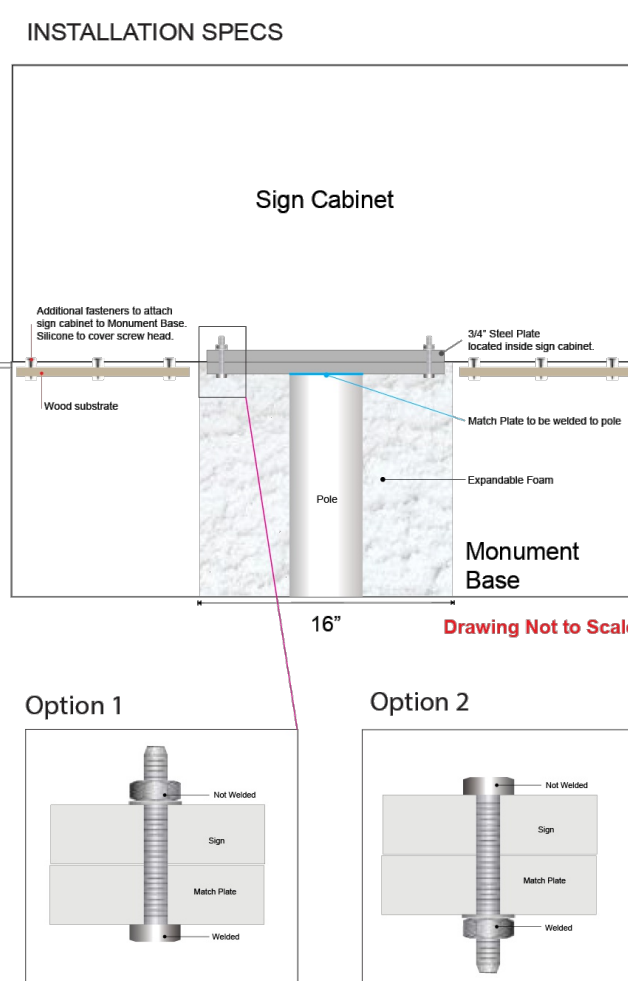
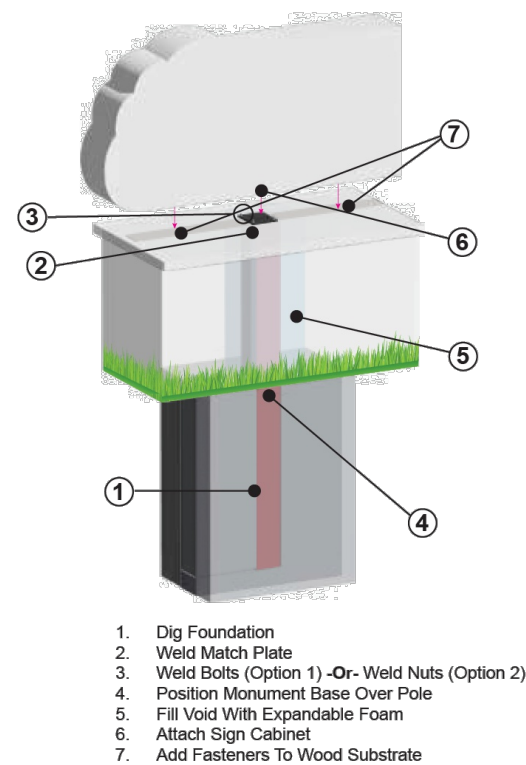
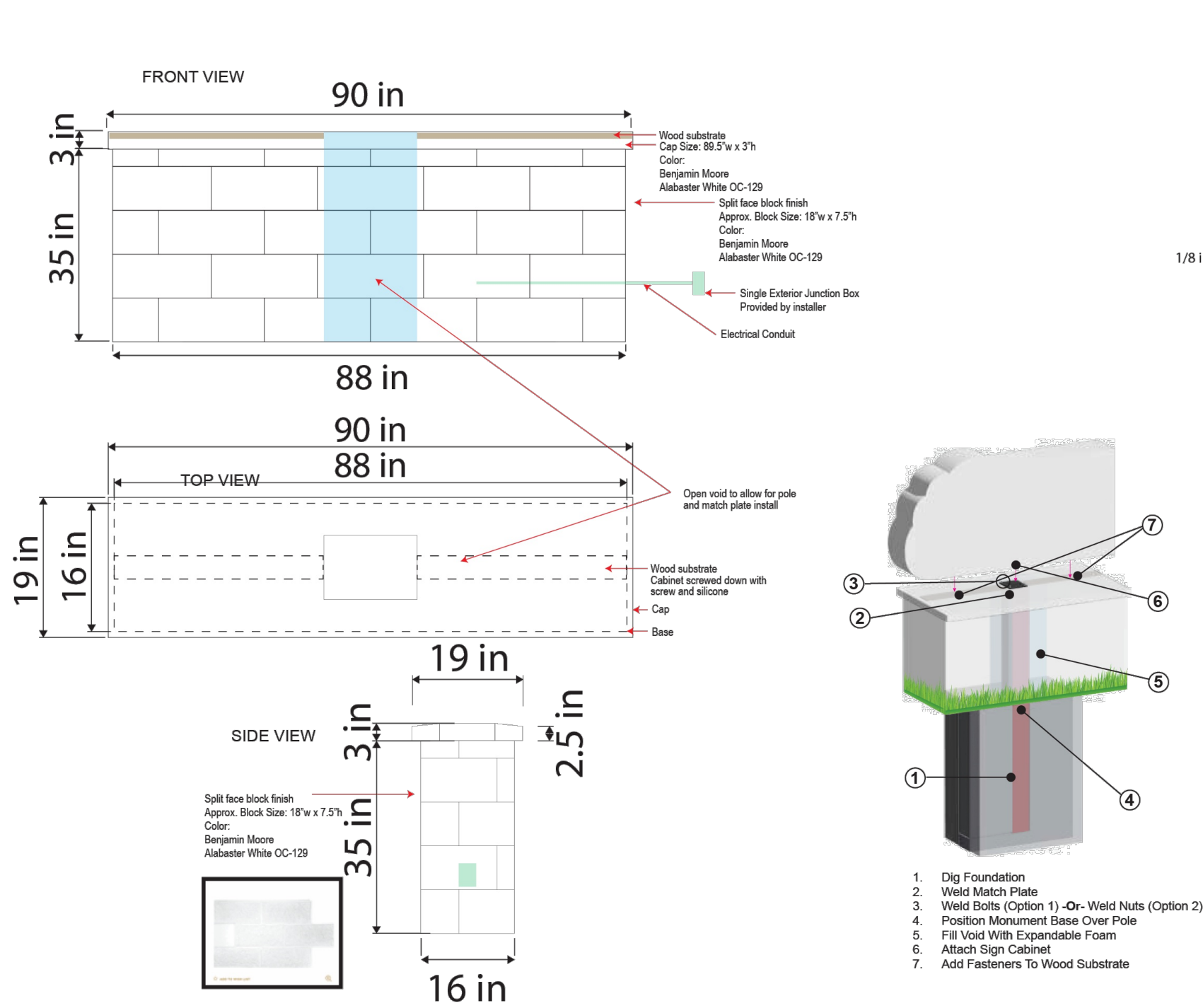
SAN. LATERAL TO MH CONNECTION DETAIL



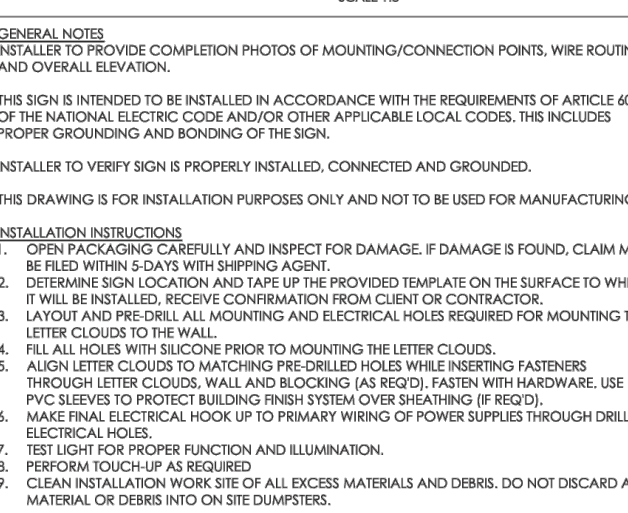
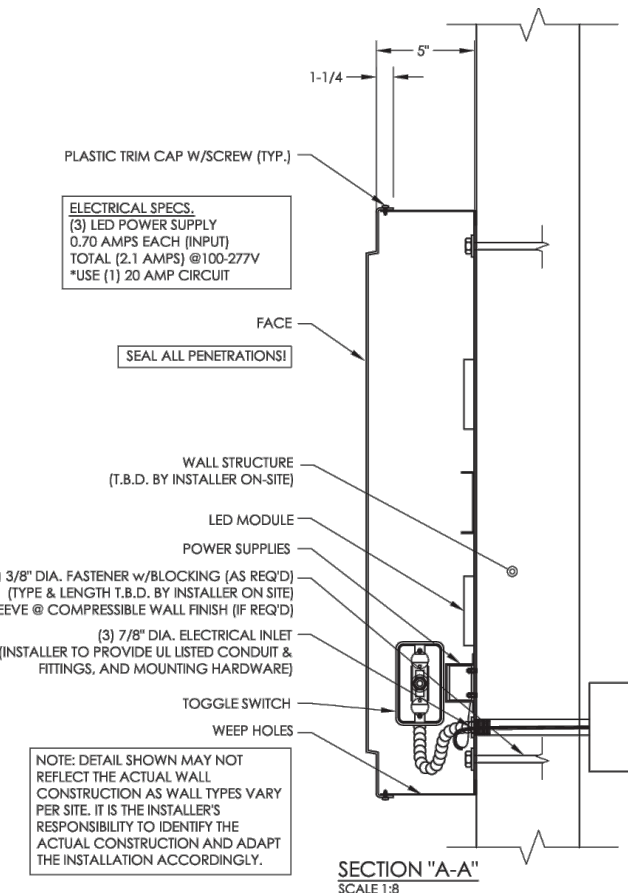
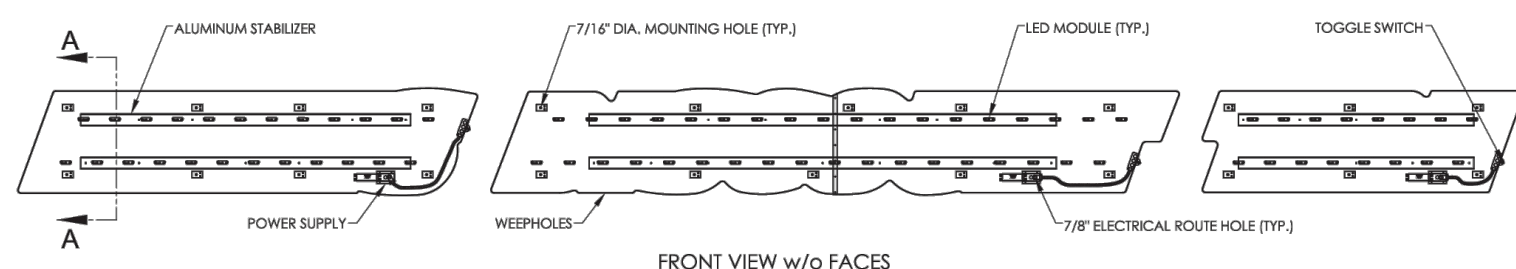
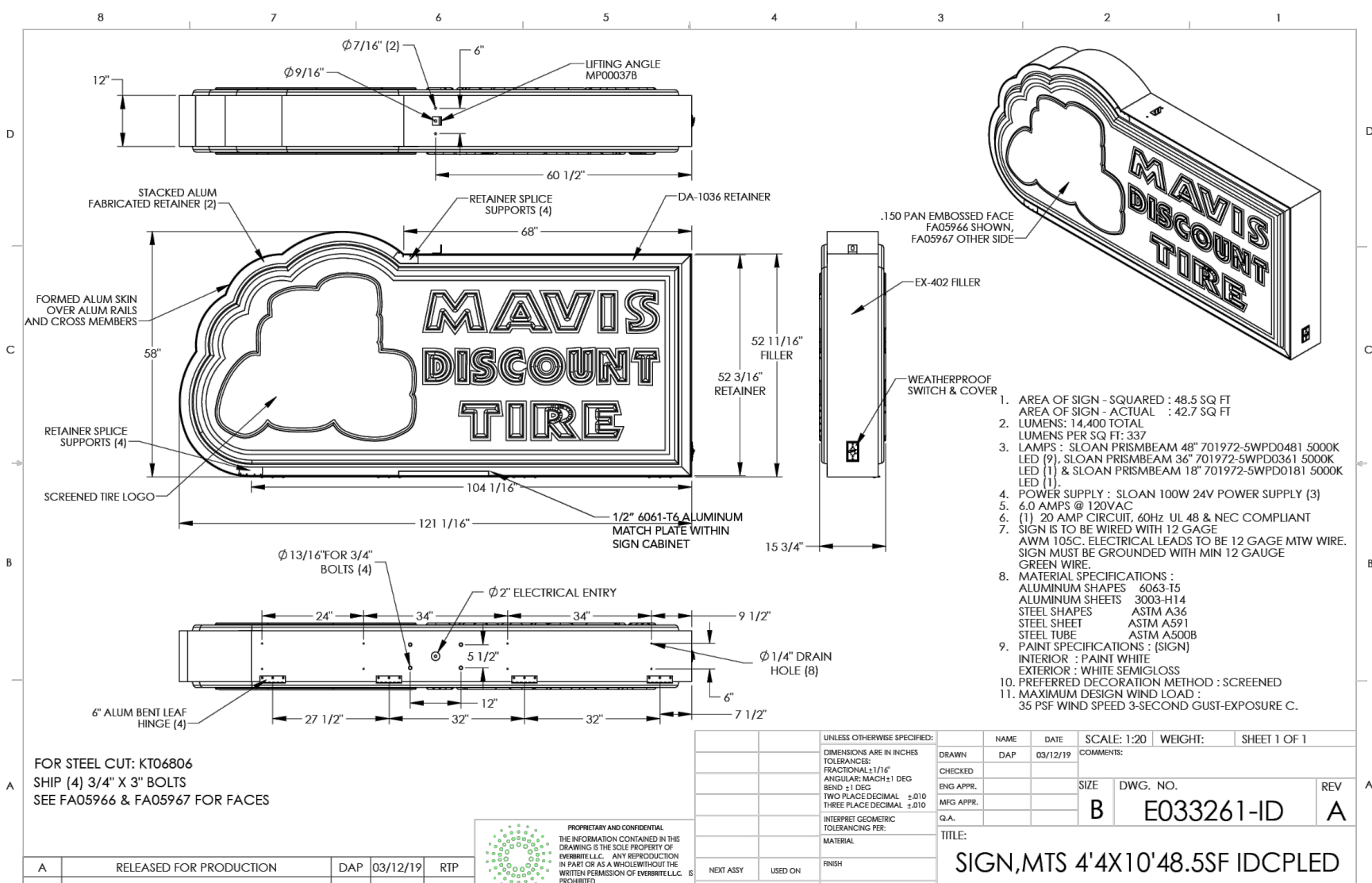
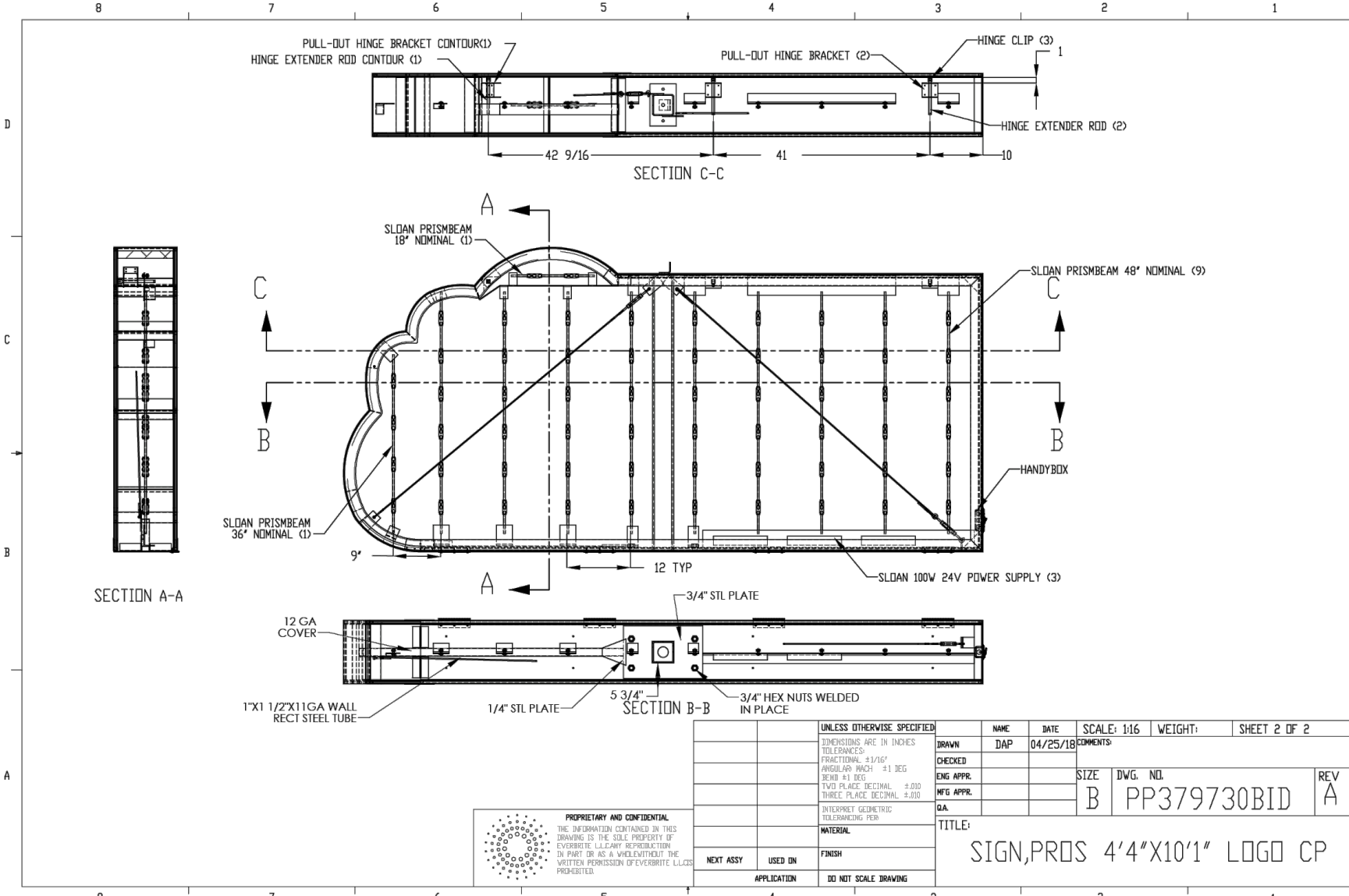
48" HDPE SCHEMATIC UNDERGROUND BASIN DETAIL
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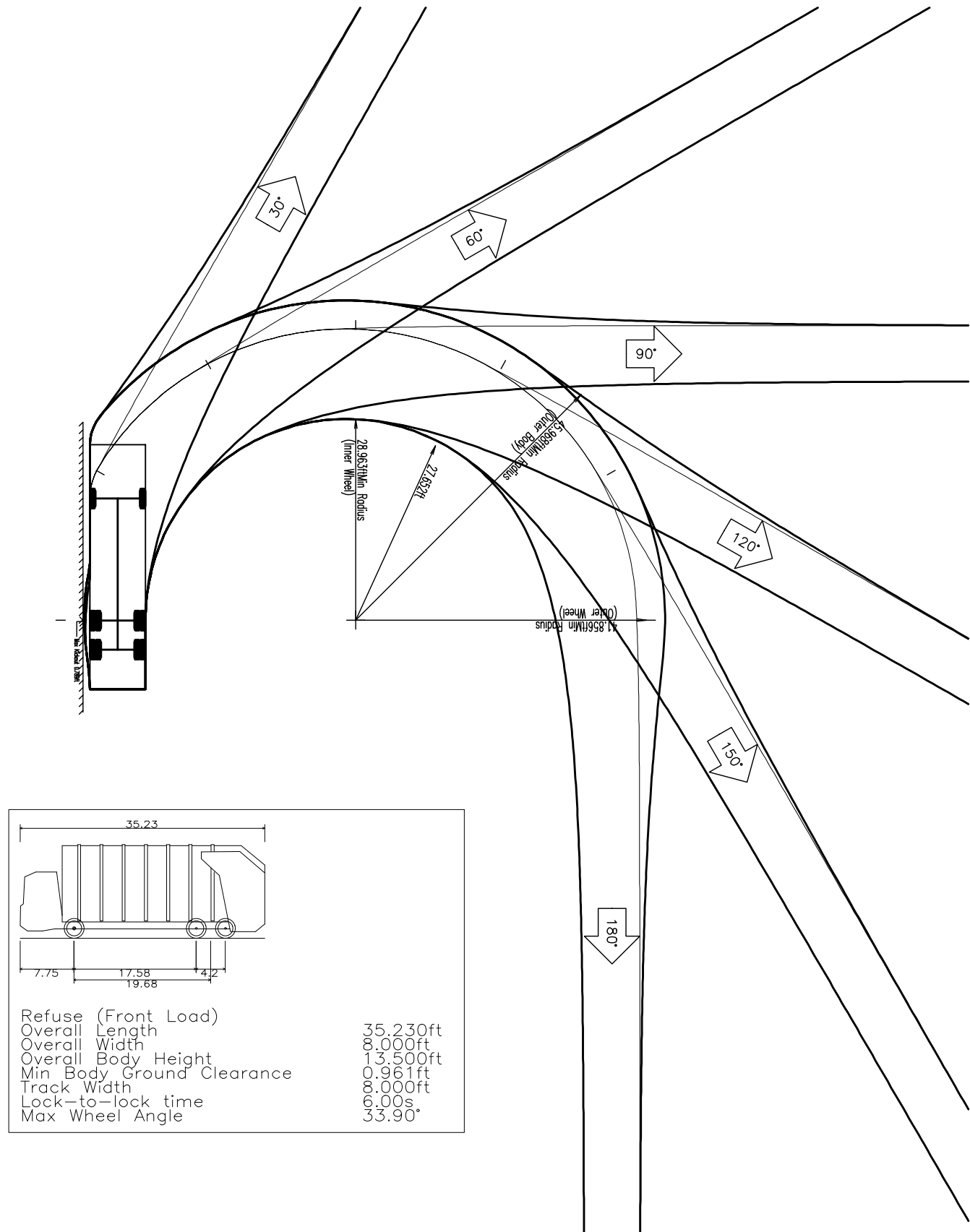
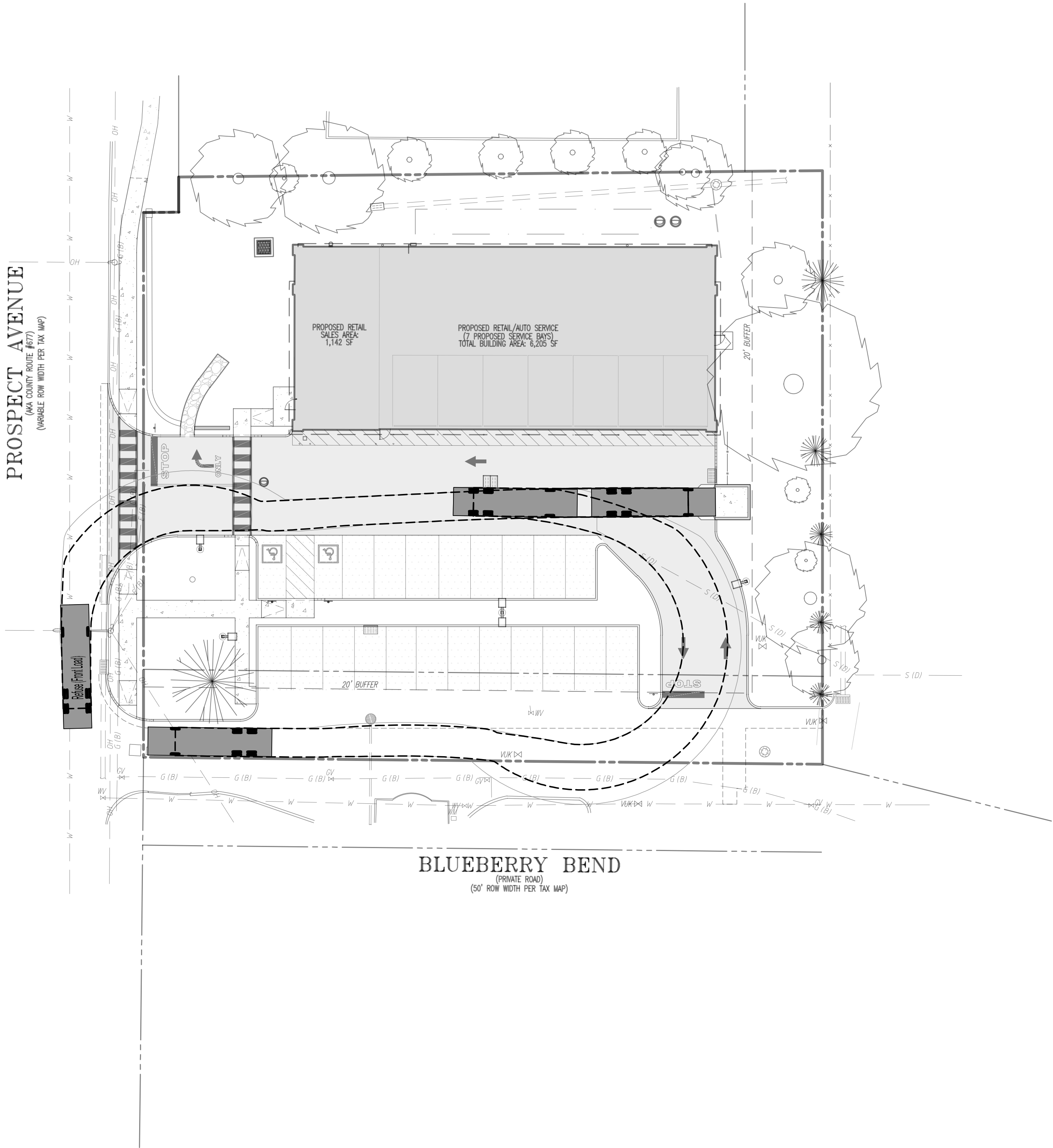
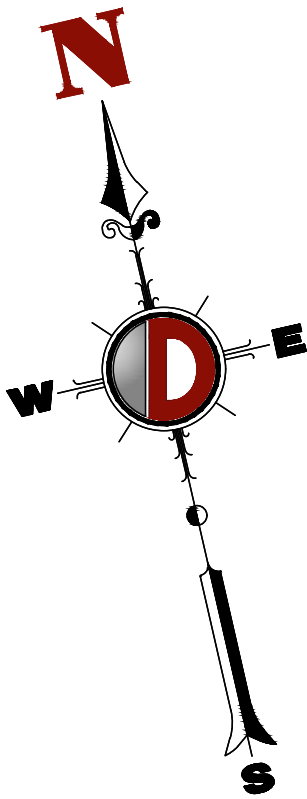


UNDERGROUND BASIN OUTLET CONTROL STRUCTURE

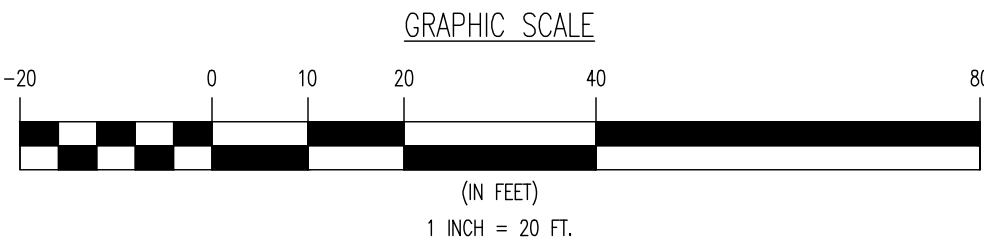


UTILITY SERVICE TRENCH DETAIL
NOT TO SCALE





Refuse (Front Load)	35.230ft
Overall Length	17.580ft
Overall Width	7.750ft
Overall Body Height	10.000ft
Min Body Ground Clearance	0.500ft
Track Width	6.000ft
Lock-to-lock time	6.00s
Max Wheel Angle	33.90°



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TITLE:
VEHICLE CIRCULATION (TRASH TRUCK)

PROJECT: **MAVIS TIRE SUPPLY, LLC**
PROPOSED AUTOMOTIVE SERVICE AND RETAIL CENTER
BLOCK 105, LOT 64.01
460 PROSPECT AVENUE
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

DESIGNED BY: AMN
CHECKED BY: KED
CHECKED BY: RRR

RODMAN R. RITCHIE
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 43547

ROBERT P. FREUD
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 41938

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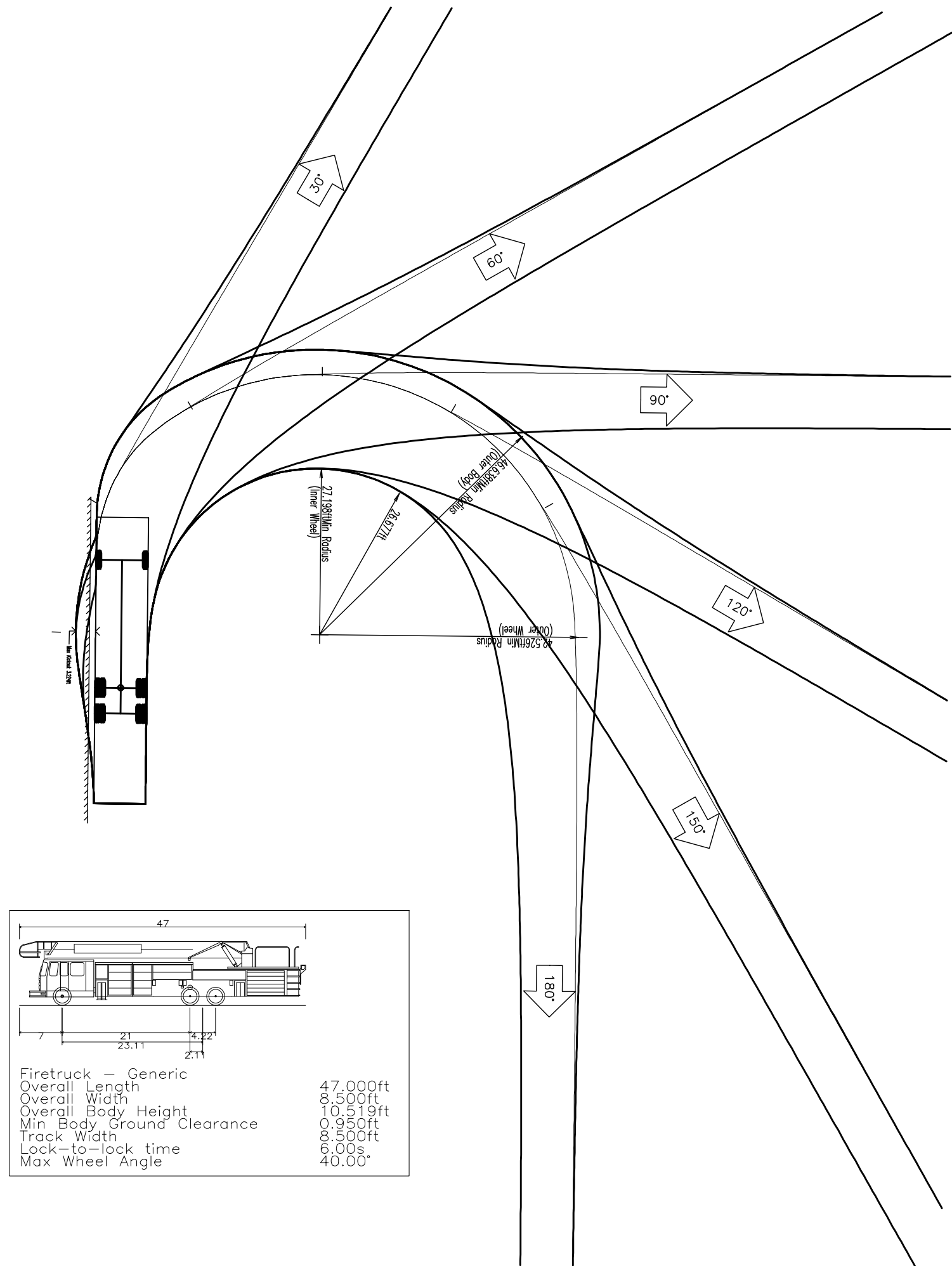
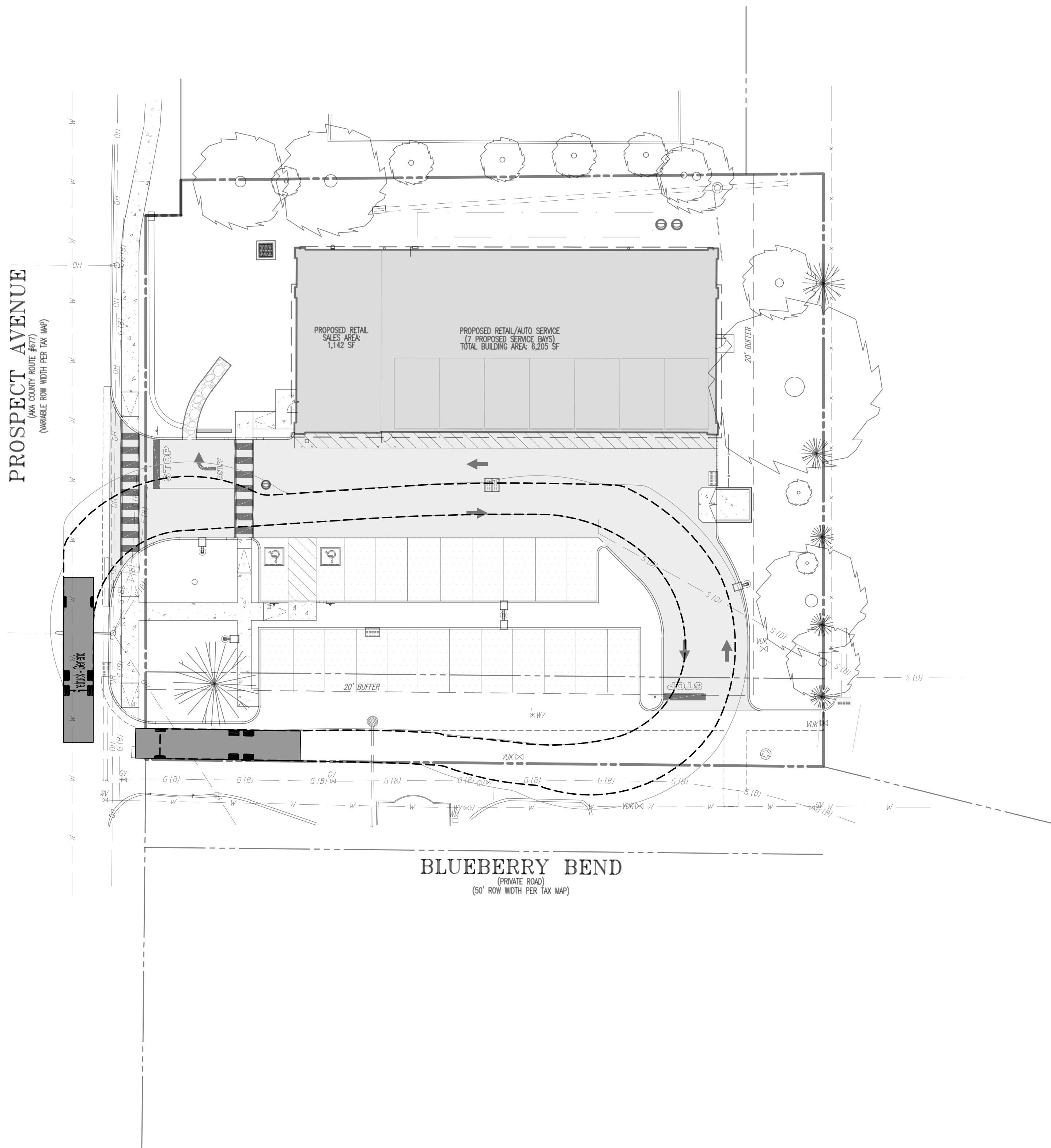
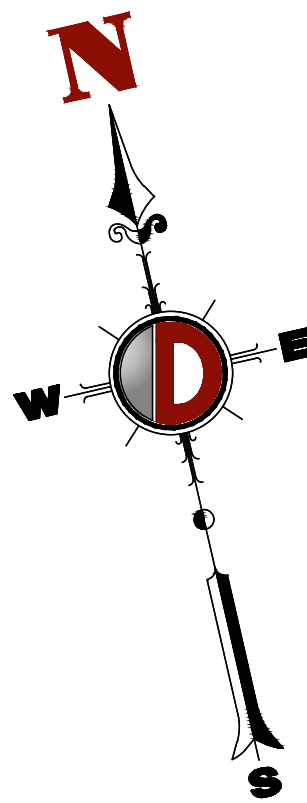
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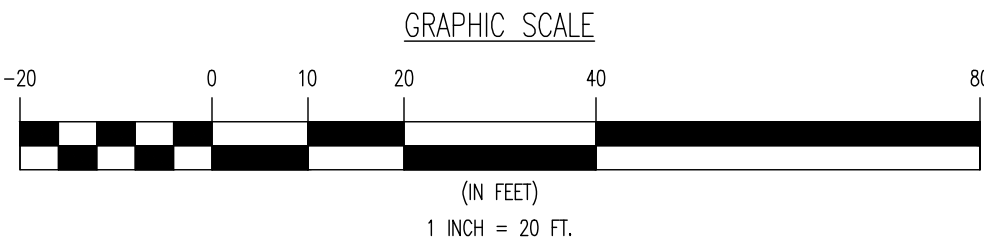
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SHEET No:
17
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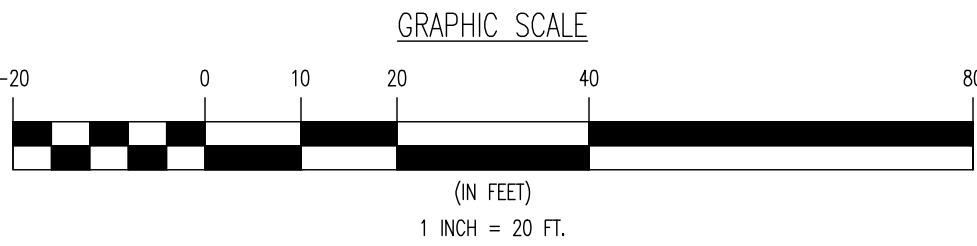
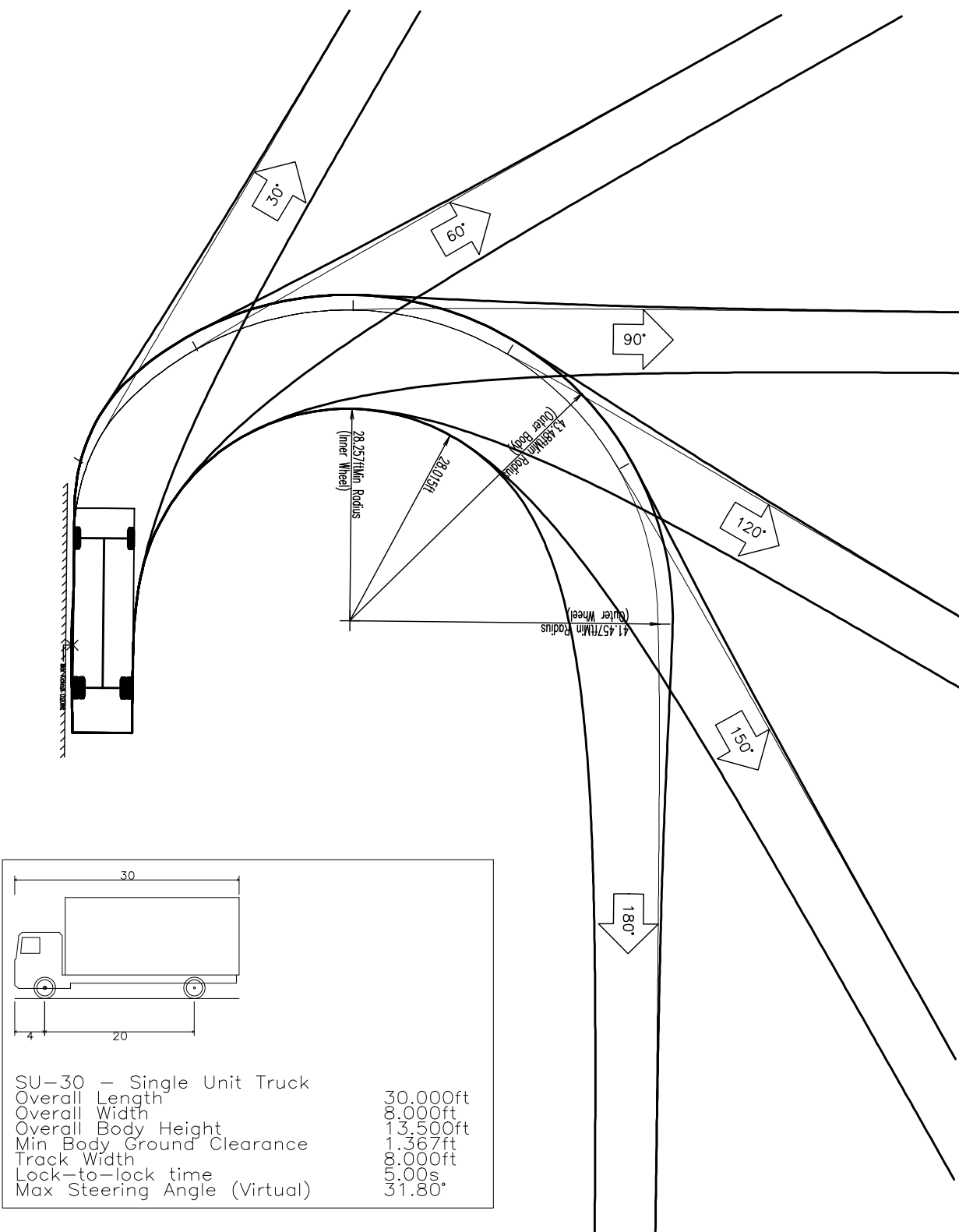
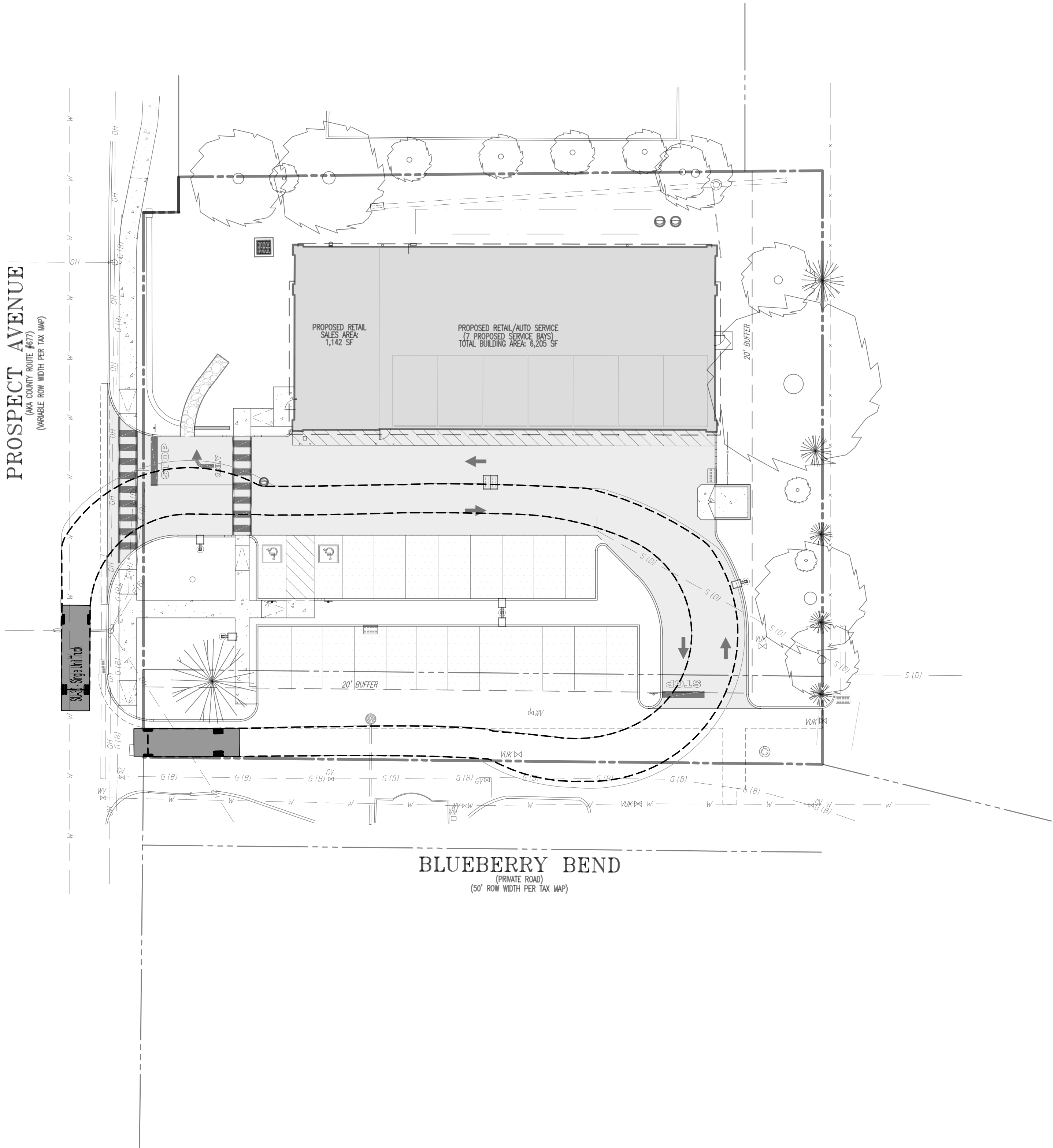
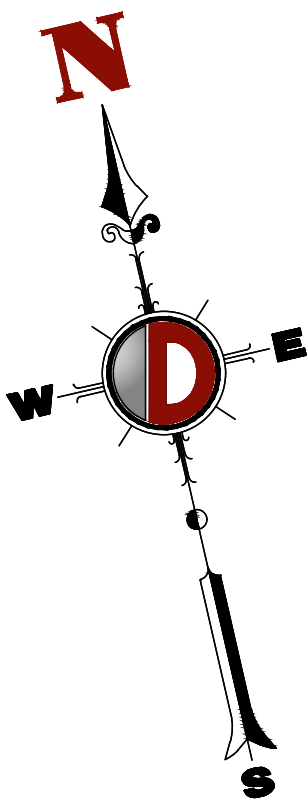


Firetruck - Generic	47.000ft
Overall Length	8.500ft
Overall Width	10.519ft
Overall Body Height	10.950ft
Min. Body Ground Clearance	6.000ft
Track Width	6.000ft
Lock-to-lock time	6.000s
Max Wheel Angle	40.00°



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PROJECT: MAVIS TIRE SUPPLY, LLC PROPOSED AUTOMOTIVE SERVICE AND RETAIL CENTER BLOCK 105, LOT 64.01 460 PROSPECT AVENUE TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY		SHEET No: 18 OF 19 Rev. # 1	
TITLE: VEHICLE CIRCULATION (FIRE TRUCK)		PROTECT YOURSELF ALL STATES REQUIRE REPRODUCTION OF CONTRACT, SPECIFICATIONS, OR ANY OTHER DRAWING TO BE SIGNED BY THE ENGINEER FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM	
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TITLE:
VEHICLE CIRCULATION (SU-30)

PROJECT: **MAVIS TIRE SUPPLY, LLC**
PROPOSED AUTOMOTIVE SERVICE AND RETAIL CENTER
BLOCK 105, LOT 64.01
460 PROSPECT AVENUE
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

RODMAN R. RITCHIE
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 43547

ROBERT P. FREUD
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Plotted: 02/19/26 - 9:27 AM, By: lverase, Product Ver: 25.0
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