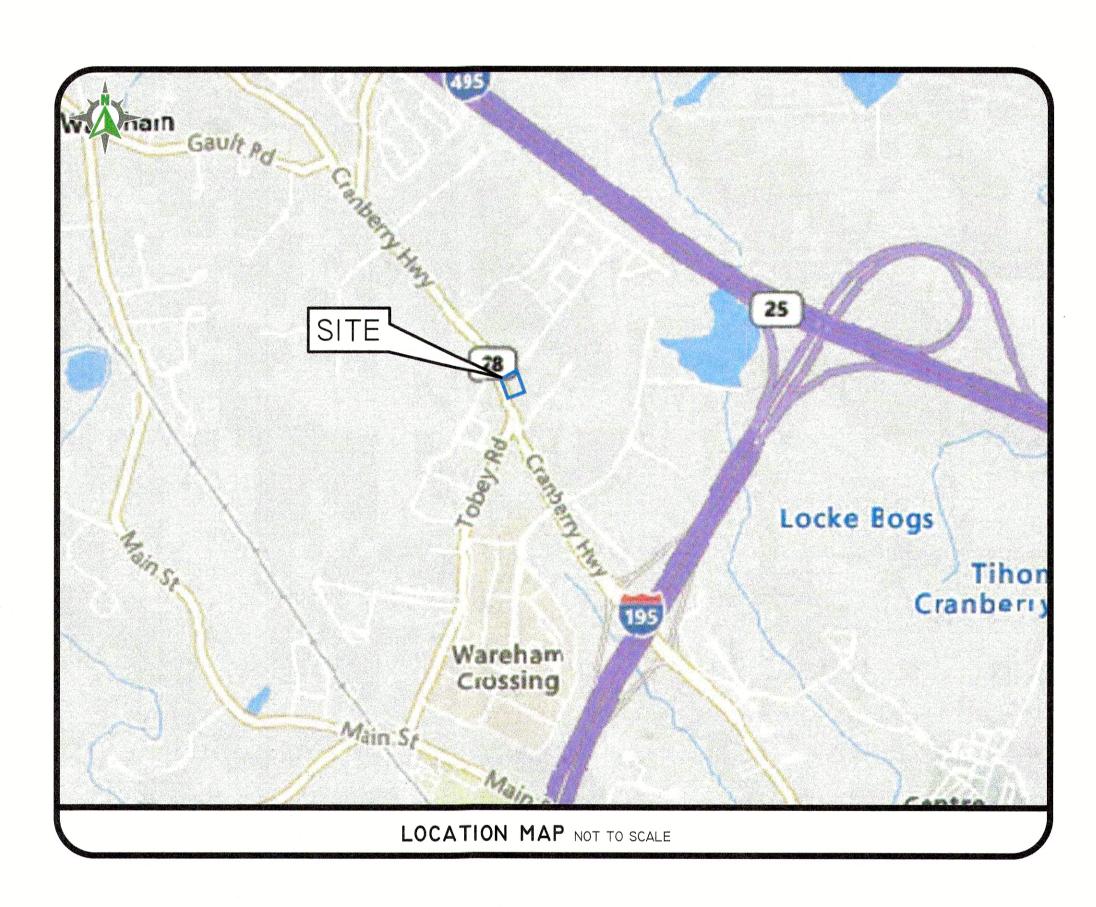
ZONING BOARD OF APPEALS SUBMISSION

CRANBERRY HIGHWAY

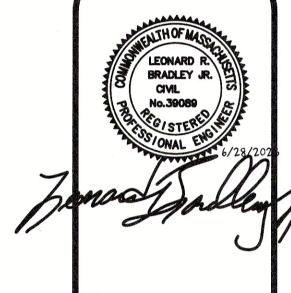
LOCATED ON CRANBERRY HIGHWAY WAREHAM, MASSACHUSETTS

PLAN BOOK 63 PAGE 1009 LOT 2



SHEET LIST TABLE

- COVER SHEET
- 2 AERIAL AND HALF MILE RADIUS
- 3 Notes and Legend
- 4 EXISTING CONDITIONS SURVEY
- 5 STORMWATER POLLUTION PREVENTION PLAN
- 6 SITE LAYOUT PLAN
- 7 GRADING AND DRAINAGE PLAN
- 8 Utilities Plan
- 9 UIS DETAIL SHEET I
- 10 UIS DETAIL SHEET 2
- II DETAIL SHEET 3
- 12 DETAIL SHEET 4
- 13 LANDSCAPE PLAN
- 14 LANDSCAPE NOTES & DETAILS



RATE OF STORMWATER RUNOFF ONTO THE STATE HIGHWAY. ALL WORK WITHIN THE STATE RIGHT OF WAY MUST CONFORM TO THE MA STANDARD SPECIFICATIONS. DETAILS, AND ADDENDUMS.

MAINTENANCE PLAN (08M) ARE REQUIRED DOCUMENTS WITH THIS PLAN SET AND MUST BE MAINTAINED BY THE CONTRACTOR AND OWNER ON SITE.

WHERE THERE IS MINIMAL FLOODING.

HARVARD, MA 01450

- . THIS SITE IS LOCATED IN FEMA FLOOD ZONE X. REFERENCE FEMA FLOOD INSURANCE RATE MAP 25023C0486K, MAP REVISED JULY 6, 2021. (FLOOD PLAIN DESCRIPTIONS SHOWN BELOW) • ZONE X (UNSHADED) - THIS SITE IS LOCATED IN FEMA FLOOD ZONE X, WHICH ARE AREAS
- THE BOUNDARY LINE AS SHOWN ON THE ENGINEERING PLAN SET DEPICTS THE RESULTS OF A BOUNDARY RETRACEMENT SURVEY AS PERFORMED BY DIPRETE ENGINEERING. THIS PLAN IS NOT TO BE CONSTRUED AS A BOUNDARY RETRACEMENT SURVEY PLAN AND IS NOT SUITABLE FOR RECORDING AS A SURVEY PLAN IN CONFORMANCE WITH THE RULES AND REGULATIONS AS STATED
- ALL WORK PERFORMED HEREIN IS TO BE GOVERNED BY CURRENT EDITIONS OF THE MASSDOT HIGHWAY DIVISION CONSTRUCTION STANDARD DETAILS, TOWN OF WAREHAM STANDARD SPECIFICATIONS AND DETAILS AND SPECIFICATIONS INCLUDED AS PART OF THE DRAWINGS. IN AREAS OF CONFLICT BETWEEN THE DIFFERENT SPECIFICATIONS, THE DESIGN PLANS AND PROJECT SPECIFICATIONS WILL TAKE PRECEDENCE OVER THE GENERAL SPECIFICATIONS AND THE DESIGN ENGINEER WILL INTERPRET THE CONSTRUCTION REQUIREMENT. THE CONTRACTOR IS ADVISED TO SUBMIT A REQUEST FOR INFORMATION (RFI) FOR ANY AREAS OF CONFLICT BEFORE COMMITTING TO
- THE FOLLOWING DOCUMENTS ARE CONSIDERED PART OF THE PROJECT PLANS AND THE CONTRACTOR/OWNER MUST MAINTAIN THESE DOCUMENTS AS PART OF A FULL PLAN SET:
- STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE SWPPP CONTAINS THE
- EROSION CONTROL MEASURES

SEQUENCE OF CONSTRUCTION

- SHORT TERM MAINTENANCE . ESTABLISHMENT OF VEGETATIVE COVER
- CONSTRUCTION POLLUTION PREVENTION
- OPERATION AND MAINTENANCE PLAN (0&M). THE 0&M CONTAINS:
- LONG TERM MAINTENANCE LONG TERM POLLUTION PREVENTION
- THIS PLAN SET REFERENCES MASSDOT HIGHWAY DIVISION STANDARD DETAILS (DESIGNATED AS MASSDOT STD XXX.X.X.). MASSDOT STANDARD DETAILS ARE AVAILABLE FROM MASSDOT AND ONLINE AT HTTPS://WWW.MASS.GOV/LISTS/CONSTRUCTION-DETAILS
- THE SITE IS TO BE SERVICED BY PUBLIC WATER AND PUBLIC SEWER.
- THE DRAINAGE SYSTEM IS DESIGNED TO MEET THE WAREHAM SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WITH THE USE OF CATCH BASINS AND UNDERGROUND INFILTRATION SYSTEMS. THE STORMWATER MANAGEMENT SYSTEM MEETS THE MASSDEP BEST MANAGEMENT
- II. THE SITE IS PROPOSED TO BE BUILT IN ONE PHASE.
- 12. SOIL EVALUATIONS WERE COMPLETED BY DIPRETE ENGINEERING ON JULY 26, 2021. ANY PROPRIETARY PRODUCTS REFERENCED IN THIS PLAN SET ARE REPRESENTATIVE OF THE MINIMUM DESIGN REQUIREMENTS FOR THE PURPOSE THEY PROPOSE TO SERVE. ALTERNATIVES TO ANY PROPRIETARY PRODUCT MAY BE SUBMITTED TO THE ENGINEER OF RECORD FOR CONSIDERATION, WHICH MUST BE ACCOMPANIED BY APPROPRIATE SPECIFICATION SHEETS/DESIGN CALCULATIONS THAT DEMONSTRATE THE ALTERNATIVE(S) MEET THE MINIMUM DESIGN PARAMETERS OF THE PRODUCT SHOWN ON THE PLANS. NO ALTERNATIVES MAY BE USED WITHOUT
- THIS PLAN SET MAY REFERENCE AND/OR INCLUDE REPRODUCTIONS OF PROPRIETARY PRODUCTS/ DETAILS BY OTHERS, AND/OR THEIR ASSOCIATED SPECIFICATIONS. ANY REFERENCED OR REPRODUCED PROPRIETARY PRODUCT OR DETAIL BY OTHERS THAT IS SHOWN ON DIPRETE PLANS IS STRICTLY FOR INFORMATION/SPECIFICATION PURPOSES ONLY, DIPRETE ENGINEERING DOES NOT WARRANT ANY PROPRIETARY PRODUCTS, DETAILS BY OTHERS OR THEIR RESPECTIVE DESIGNS. IF A DIPRETE ENGINEERING PLAN INCLUDES A PROPRIETARY PRODUCT/DETAIL BY OTHERS (EITHER EXPLICITLY OR IMPLIED) AND IS STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND/OR REGISTERED LANDSCAPE ARCHITECT OF DIPRETE ENGINEERING, SAID STAMP DOES NOT EXTEND TO ANY PORTION OF THE PROPRIETARY PRODUCT/DETAIL BY OTHERS OR ITS DESIGN.

SOIL INFORMATION

(REFERENCE: USDA NATURAL RESOURCES CONSERVATION SERVICE) SOIL NAME DESCRIPTION

THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.

259B CARVER LOAMY COARSE SAND, 3 TO 8 PERCENT SLOPES 602B URBAN LAND, 0 TO 8 PERCENT SLOPES

AND DESIGN ENGINEER PRIOR TO CONSTRUCTION.

LAYOUT AND MATERIALS:

- DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
- CURBING MUST BE PRECAST CONCRETE, MONOLITHIC CONCRETE, CAST IN-PLACE CONCRETE, OR BITUMINOUS BERM OR AS LABELED ON THE PLANS.
- SIDEWALK MUST BE CONCRETE, EXPOSED AGGREGATE CONCRETE, STAMPED CONCRETE OR BITUMINOUS OR AS LABELED ON THE PLANS.
- SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR MUST REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT
- FEATURES. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS PERTAINING TO
- THE BUILDING, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING
- CONSTRUCTION MUST BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR. CONTRACTOR MUST NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS. CONTRACTOR MUST VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE STAMPED PAPER COPIES OF THE PLANS AND
- SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS. ALL GUARDRAIL ONSITE MUST BE STEEL BACKED TIMBER GUARDRAIL WITH STEEL POSTS, IN CONFORMANCE WITH SECTION 5.4.1.7 OF THE AASHTO ROADSIDE DESIGN GUIDE. ALTERNATIVE GUARDRAILS WILL BE CONSIDERED BY THE DESIGN ENGINEER IF THEY ARE DOT APPROVED EQUAL AND ACCEPTABLE TO THE OWNER. ALTERNATIVES MUST BE APPROVED IN WRITING BY THE OWNER
- INFRARED TREATMENT OF PAVEMENT IS REQUIRED AT ALL CURB CUTS, ANY DISTURBED PAVEMENT ON ROADWAYS AND WHERE ANY NEW PAVEMENT MEETS EXISTING PAVEMENT.
- ALL EXISTING PAVEMENT MARKING REMOVED AS INCIDENTAL DURING CONSTRUCTION MUST BE REPLACED IN-KIND FOLLOWING COMPLETION OF CONSTRUCTION UNLESS OTHERWISE NOTED.
- NEW PAVEMENT MARKING MUST BE FAST DRYING TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248 TYPE F. PAINT MUST BE APPLIED AS SPECIFIED BY THE MANUFACTURER.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

- I. THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ON SITE WHICH I. CONSTRUCTION TO COMMENCE FALL 2021 OR UPON RECEIPT OF ALL NECESSARY APPROVALS. MUST BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE APPLICABLE REGULATIONS AND AUTHORITY HAVING JURISDICTION. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER. THE DIRECTOR OF PUBLIC WORKS, THE TOWN ENGINEER, AND THE CONSERVATION COMMISSION AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
- 2. ALL EROSION CONTROL INCLUDING (BUT NOT LIMITED TO) TEMPORARY SWALES, TEMPORARY SEDIMENT TRAPS, ETC. MUST BE INSTALLED PER THE LATEST EDITION OF THE MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS (MESCG) AND THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). NOTE THE SOIL EROSION AND SEDIMENT CONTROL SHOWN ON THESE PLANS ARE THE MINIMUM QUANTITY/TYPE OF EROSION CONTROL DEVICES AND MATERIALS DEEMED REQUIRED BY DIPRETE ENGINEERING TO MEET THE OBJECTIVES OF THE MESCG, BUT IS CONSIDERED A GUIDE ONLY. ADDITIONAL MEASURES/ALTERNATE CONFIGURATIONS MAY BE REQUIRED IN ORDER TO MEET THE MESCG BASED ON FACTORS INCLUDING (BUT NOT LIMITED TO) SITE PARAMETERS, WEATHER, INSPECTIONS AND UNIQUE FEATURES. THE SWPPP WILL CONTINUE TO EVOLVE THROUGHOUT CONSTRUCTION/PHASES. PURSUANT TO NOTE I ABOVE. SWPPP REMAINS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL THE SITE IS FULLY STABILIZED AND/OR SWPPP RESPONSIBILITIES ARE ASSUMED BY THE OWNER IN WRITING.
- TEMPORARY SWALES MUST BE USED TO CONTROL RUNOFF DURING CONSTRUCTION OF THE PROPOSED SITE WORK. TEMPORARY SWALES MUST BE VEGETATED AFTER CONSTRUCTION. EROSION CONTROL MATS MUST BE INSTALLED. IF NECESSARY, TO PREVENT EROSION AND SUPPORT VEGETATION. AFTER CONSTRUCTION IS COMPLETE AND TRIBUTARY AREAS TO THE SWALES HAVE BEEN STABILIZED, THE TEMPORARY SWALES MUST BE CLEARED AND FINAL DESIGN, INCLUDING
- INSTALLATION OF THE GRASS SWALES, TO BE PER THE DESIGN PLANS. ONCE THE SEDIMENT TRAPS ARE NO LONGER REQUIRED AND ALL TRIBUTARY AREAS HAVE BEEN STABILIZED, THE TEMPORARY SEDIMENT TRAPS MUST BE CLEANED AND BROUGHT TO FINAL DESIGN
- 5. INLET PROTECTION MUST BE INSTALLED ON ALL CATCH BASINS ONCE CONSTRUCTED.
- 7. CONTRACTOR MAY MODIFY SEQUENCE OF CONSTRUCTION WITH APPROVAL FROM DESIGN ENGINEER

6. FOR SEQUENCE OF CONSTRUCTION, PROJECT PHASING AND CONSTRUCTION PHASING, SEE SWPPP

- AND OWNER.
- 8. IF CONCRETE TRUCKS ARE WASHED OUT ON SITE, ALL WASHOUT MUST BE PERFORMED IN THE DESIGNATED CONCRETE WASHOUT AREA.

DEMOLITION NOTES

- CONTRACTOR MUST OBTAIN ALL FEDERAL, STATE, AND MUNICIPAL APPROVALS PRIOR TO THE START OF CONSTRUCTION.
- 2. CONTRACTOR MUST PERFORM DAILY SWEEPING AT CONSTRUCTION ENTRANCE DURING DEMOLITION AND CONSTRUCTION TO MINIMIZE SEDIMENTS ON EXTERNAL STREETS.
- 3. ANY EXISTING BUILDING(S) AND PROPERTY PROPOSED TO REMAIN THAT ARE DAMAGED BY THE
- CONTRACTOR MUST BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR IS RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) ALL MATERIALS
- INDICATED ON THE PLANS UNLESS SPECIFIED OTHERWISE HERE IN. R&D MATERIALS MUST INCLUDE BUT ARE NOT LIMITED TO PAVEMENT, GRAVEL, CATCH BASINS, MANHOLES, GRATES/FRAMES/COVERS, AND ANY EXCESS SOIL THAT IS NOT INCORPORATED INTO THE WORK.
- IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, ALL DISTURBED AREAS. INCLUDING THE CONTRACTOR'S STOCKPILE AND STAGING AREAS WITHIN THE LIMIT OF WORK, MUST BE RESTORED TO MATCH THE DESIGN PLANS.
- 6. CONTRACTOR MUST DOCUMENT LOCATION OF ALL SUBSURFACE UTILITIES REMAINING IN PLACE AFTER DEMOLITION (ACTIVE AND INACTIVE/ABANDONED). LOCATION MUST BE DOCUMENTED BY FIELD SURVEY OR SWING TIES. COPIES OF LOCATION DOCUMENTATION MUST BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF DEMOLITION AND PRIOR TO START OF NEW CONSTRUCTION. A MARKER MUST BE INSTALLED TO FINISH GROUND AT ALL INSTALLED CAPS/PLUGS. THE MARKER CAN BE A POST IN CONSTRUCTION AREAS OR PAINTED ON A PERMANENT SURFACE.
- ACTIVE UTILITY LINES AND STRUCTURES NOT SPECIFICALLY NOTED ON PLANS, BUT WHICH ARE ENCOUNTERED TO BE IN CONFLICT WITH THE PROPOSED WORK, MUST BE EXTENDED, PROTECTED, OR REWORKED BY THE CONTRACTOR AS DIRECTED OR REQUIRED BY THE UTILITY ENTITY OR OWNER UNLESS OTHERWISE NOTED.
- CONTRACTOR MUST COORDINATE THE CUTTING AND CAPPING OF ALL UTILITIES WITH THE OWNER, THE MUNICIPALITY, AND ALL APPLICABLE UTILITY ENTITIES HAVING JURISDICTION.
- INACTIVE SUBSURFACE UTILITIES NOT IN CONFLICT WITH THE PROPOSED WORK AREA MAY BE ABANDONED IN PLACE WITH WRITTEN PERMISSION FROM THE OWNER.

- I. ALL TRAFFIC CONTROL MUST CONFORM TO THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) CURRENT EDITION.
- 2. DURING CONSTRUCTION, TRAFFIC CONES MUST BE USED FOR SEPARATION OF ACTIVE TRAFFIC FROM WORK ZONE PER MUTCD REQUIREMENTS.
- 3. DURING CONSTRUCTION FLAGGERS MUST BE EMPLOYED TO ENSURE SAFETY FOR INTERACTION OF CONSTRUCTION VEHICLES AND ACTIVE TRAFFIC.
- 4. ALL SIGNS, FLAGGERS, TRAFFIC CONTROL DEVICES, AND TEMPORARY TRAFFIC ZONE ACTIVITIES MUST MEET THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC (MUTCD) LATEST EDITION AND SUBSEQUENT ADDENDA.
- 5. TEMPORARY CONSTRUCTION SIGNS MUST BE MOUNTED ON MASSDOT APPROVED SUPPORTS AND MUST BE REMOVED OR COVERED WHEN NOT APPLICABLE.

AS-BUILT NOTES:

ALL COMPONENTS OF THE DRAINAGE, SEWER, AND WATER SYSTEMS MUST BE MUST BE FIELD LOCATED PRIOR TO COVERING. NOTIFY SURVEYOR A MINIMUM OF SEVENTY-TWO (72) HOURS IN ADVANCE OF NEED FOR FIELD LOCATION OF IMPROVEMENTS. SURVEYOR MUST PROVIDE OWNER AND CONTRACTOR WITH WRITTEN NOTICE OF COMPLETION OF FIELD WORK PRIOR TO CONTRACTOR COVERING IMPROVEMENTS. OWNER/DIPRETE WILL NOT ACCEPT FIELD MEASUREMENTS FROM THE SITE CONTRACTOR.

- ALL WORK TO BE DONE WITHIN THE STATE RIGHT OF WAY MUST CONFORM TO THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES LATEST REVISION. STANDARD DETAILS FOR THIS WORK ARE THE MASSDOT HIGHWAY DIVISION CONSTRUCTION STANDARD DETAILS LATEST EDITION
- 2. ALL TRAFFIC CONTROL MUST CONFORM TO THE FEDERAL HIGHWAY ADMINITRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, INCLUDING ALL REVISIONS. LANE OR SHOULDER CLOSURES MUST NOT BE PERFORMED WITHIN THE STATE ROW DURING PEAK TRAFFIC HOURS.
- 4. SEWER AND WATER CONNECTIONS WITHIN THE STATE RIGHT OF WAY WILL REQUIRE A SEPARATE MASSDOT UTILITY PERMIT, WHICH CONTRACTOR MUST OBTAIN BEFORE CONSTRUCTION.
- 5. THE DRAINAGE SYSTEM IS DESIGNED TO DECREASE BOTH STORMWATER RUNOFF RATE, AND STORMWATER RUNOFF VOLUME TO THE STATE RIGHT OF WAY FROM PRE-DEVELOPMENT TO POST-DEVELOPMENT. THERE WILL BE NO INCREASE IN RUNOFF TO THE STATE RIGHT OF WAY FROM THE PROPOSED DEVELOPMENT.

AMERICANS WITH DISABILITIES ACT (ADA) NOTES:

- I. ALL IMPROVEMENTS MUST COMPLY WITH THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES" (ADAAG) BY THE US DEPARTMENT OF JUSTICE (CURRENT EDITION).
- 2. MAXIMUM RUNNING SLOPE ALONG ALL ACCESSIBLE PATHS OF TRAVEL MUST BE 4.5% (0.045 FT/FT), AND MAXIMUM CROSS SLOPE ACROSS ALL ACCESSIBLE PATHS OF TRAVEL MUST BE 1.5%
- 3. ADA PARKING SPACES AND LOADING AREAS: THE STEEPEST SLOPE OF THE SPACE, MEASURED IN ANY DIRECTION (INCLUDING DIAGONALLY), MUST BE LESS THAN OR EQUAL TO 2% (0.02 FT/FT). DIPRETE ENGINEERING GENERALLY RECOMMENDS A MAXIMUM OF 1.4% (0.014 FT/FT) BE USED FOR BOTH RUNNING AND CROSS SLOPES IN ORDER TO COMPLY. 4. A MINIMUM 5'X5' LANDING MUST BE PROVIDED IN FRONT OF ALL PUBLICLY ACCESSIBLE BUILDING
- ENTRANCES/ EGRESSES. THE STEEPEST SLOPE OF THE LANDING, MEASURED IN ANY DIRECTION (INCLUDING DIAGONALLY), MUST BE LESS THAN OR EQUAL TO 2% (0.02 FT/FT). DIPRETE ENGINEERING GENERALLY RECOMMENDS A MAXIMUM OF 1.4% (0.014 FT/FT) BE USED FOR BOTH RUNNING AND CROSS SLOPES IN ORDER TO COMPLY. 5. FOR EVERY 6 (OR FRACTION OF 6) ADA PARKING SPACES, AT LEAST ONE MUST BE A VAN PARKING
- SPACE. FOR EXAMPLE, IF 7 ADA PARKING SPACES ARE REQUIRED, A MINIMUM OF 2 MUST BE VAN
- 6. NOTWITHSTANDING THE NOTES LISTED ABOVE, TOWN OR STATE-SPECIFIC STANDARDS MAY BE MORE STRINGENT AND OVERRULE. IT IS THE RESPONSIBILITY OF THE USER OF THIS PLAN SET TO MAINTAIN COMPLIANCE WITH THE CONTROLLING STANDARD.
- 7. NOTE THAT THE GRADING/PLAN VIEWS AND DETAILS CONTAINED WITHIN THIS PLAN SET MAY NOT SHOW THE DETAIL NECESSARY TO CONSTRUCT WALKWAYS, RAMPS AND SPACES TO COMPLY WITH THE ABOVE REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE LEVEL OF CARE NECESSARY TO BE CERTAIN THAT THE CONSTRUCTED PRODUCT MEETS ADA/CONTROLLING STANDARDS. IN THE EVENT OF ANY NON COMPLIANCE THE CONTRACTOR MUST NOTIFY THE DESIGNER BEFORE CONSTRUCTION FOR ADVICE IN FINDING A RESOLUTION.

GRADING AND UTILITY NOTES:

- THE CONTRACTOR MUST COORDINATE WITH ALL OF THE APPROPRIATE UTILITY COMPANIES FOR AGREEMENTS TO SERVICE THE PROPOSED BUILDING. THIS MUST BE DONE PRIOR TO CONSTRUCTION. NO REPRESENTATIONS ARE MADE BY DIPRETE ENGINEERING THAT UTILITY SERVICE IS AVAILABLE.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING FINISH GRADING AND DRAINAGE AROUND THE ARCH ARCHITECT BUILDING TO ENSURE SURFACE WATER AND/OR GROUNDWATER ARE DIRECTED AWAY FROM THE
- PRIOR TO START OF CONSTRUCTION, CONTRACTOR MUST VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES. CONTRACTOR MUST NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO
- ALL PROPOSED UNDERGROUND UTILITIES SERVING THE SITE AND BUILDINGS MUST BE COORDINATED WITH OWNER, ARCHITECT, AND ENGINEER PRIOR TO INSTALLATION
- 6. ALL RETAINING WALLS AND STEEP SLOPES ARE SUBJECT TO FINAL STRUCTURAL DESIGN. DIPRETE ENGINEERING IS NOT PROVIDING THE STRUCTURAL DESIGN OF THESE ITEMS. ALL WALLS AND STEEP SLOPES MUST BE DESIGNED AND BUILT UNDER THE DIRECTION OF A MASSACHUSETTS LICENSED PROFESSIONAL ENGINEER SUITABLY QUALIFIED IN GEOTECHNICAL ENGINEERING AND CERTIFIED TO THE OWNER PRIOR TO THE COMPLETION OF THE PROJECT. SHOP DRAWINGS MUST BE SUBMITTED PRIOR TO CONSTRUCTION. FINAL STRUCTURAL DESIGN MUST INCORPORATE THE INTENT OF THE GRADING SHOWN ON THESE PLANS AND ALL WORK MUST BE WITHIN THE LIMIT OF DISTURBANCE SHOWN ON THE PLANS.
- ALL CUT AND FILL WORK MUST BE DONE UNDER THE DIRECTION OF A PROFESSIONAL GEOTECHNICAL ENGINEER, WITH TESTING AND CERTIFICATION PROVIDED TO THE APPLICANT AT THE COMPLETION OF THE PROJECT. DIPRETE ENGINEERING IS NOT PROVIDING THE FILL SPECIFICATION, GEOTECHNICAL ENGINEERING, STRUCTURAL ENGINEERING SERVICES, OR SUPERVISION AS PART OF THESE DRAWINGS.
- 8. MATERIAL STOCKPILES MUST NOT BE LOCATED IN THE RIGHT-OF-WAY, AND TRENCHES MUST NOT BE LEFT OPEN OVERNIGHT.
- ALL LOAM IN DISTURBED AREAS MUST BE STOCKPILED FOR FUTURE USE 10. ALL EXCESS SOIL, TREES, ROCKS, BOULDERS, AND OTHER REFUSE, MUST BE DISCARDED OFF SITE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS. STUMPS MUST BE GROUND ON
- II. THE SITE WILL HAVE 3" BITUMINOUS BERM AND/OR 6" CONCRETE CURBING. SITE GRADING/CONTOURS SHOWN ON THE PLANS DO NOT NECESSARILY REFLECT THE APPROPRIATE BERM/CURBING REVEAL. CONTRACTOR MUST INSTALL CURBING WITH APPROPRIATE REVEAL UNLESS OTHERWISE NOTED.
- NO STUMP DUMPS ARE PROPOSED ON SITE.

SITE OR REMOVED.

- 13. ALL DRAINAGE OUTFALLS ARE DESIGNED TO BE INSTALLED AT EXISTING GROUND ELEVATION. CONTRACTOR MUST IMMEDIATELY NOTIFY DIPRETE ENGINEERING OF ANY DISCREPANCIES WHERE EXISTING GROUND IS HIGHER THAN OUTFALL DESIGN ELEVATION. ANY RESOLUTION OF DISCREPANCIES BY THE CONTRACTOR, UNLESS AUTHORIZED IN WRITING IN ADVANCE BY THE OWNER AND DIPRETE ENGINEERING, IS DONE AT THE CONTRACTOR'S RISK.
- 14. CONTRACTOR MUST PROVIDE SAW CUTTING AND FULL DEPTH PAVEMENT RESTORATION IN AREAS WHERE PAVEMENT AND/OR SIDEWALK IS REMOVED FOR UTILITY INSTALLATION.
- 15. IF ROADWAY SURFACE PAVEMENT COURSE IS NOT TO BE INSTALLED FOR 12 MONTHS OR MORE AFTER INSTALLATION OF DRAINAGE STRUCTURES, ALL CATCH BASIN RIMS MUST BE SET AT BINDER LARCH LANDSCAPE ARCHITECT GRADE AND RAISED TO FINAL PAVEMENT GRADE PRIOR TO PLACEMENT OF SURFACE COURSE.

ALL DRAINAGE PIPING MUST BE HIGH-DENSITY POLYETHYLENE (HDPE) WITH WATERTIGHT JOINTS WHERE INSTALLED WITHIN THE SEASONAL HIGH GROUNDWATER, UNLESS NOTED OTHERWISE ON THE PLANS OR IN THE SPECIFICATIONS. ALL STORMWATER PIPE WITHIN THE STATE'S RIGHT OF WAY MUST BE REINFORCED CONCRETE PIPE (RCP).

- DRAINAGE STRUCTURES MUST BE AS FOLLOWS (UNLESS OTHERWISE NOTED ON PLANS):
- CATCH BASINS (CB): MASSDOT STD. 201.4.0 OR APPROVED EQUAL CATCH BASIN FRAMES: MASSDOT STD. 201.6.0 OR APPROVED EQUAL
- DRAINAGE MANHOLES (DMH): MASSDOT STD. 202.4.0 OR APPROVED EQUAL DRAINAGE MANHOLE FRAMES AND COVERS: MASSDOT STD. 202.6.0 OR APPROVED EQUAL
- DOWNSTREAM DEFENDERS (DD) BY HYDRO INTERNATIONAL OR APPROVED EQUAL HTTPS://WWW.HYDRO-INT.COM/EN/RESOURCES/DOWNSTREAM-DEFENDER-PDF-OR-DWG-DRAWINGS
- ALL CATCH BASINS WITHIN PARKING LOT MUST CONTAIN HOODS, AND INCLUDE 4' SUMP. ALL MANHOLES MUST SUPPORT AASHTO HS20-44 LOADING.

DRAINAGE CONNECTIONS FROM ALL YARD DRAINS (YD), AREA DRAINS (AD), TRENCH DRAINS (TD), FRENCH DRAINS (FD), WALL DRAINS (WD), AND DOWNSPOUTS (DS) ARE SHOWN FOR SCHEMATIC PURPOSES ONLY. THE LEVEL OF DETAIL SHOWN DOES NOT INCLUDE ALL JOINTS THAT MAY BE REQUIRED FOR CONSTRUCTION. ALL FITTINGS AND PIPE SLOPES TO TIE INTO MAIN TRUNK LINE MUST BE FIELD FIT BY CONTRACTOR.

ALL SANITARY SEWER PIPING TO BE SDR 35 UNLESS NOTED OTHERWISE ON THE PLANS OR IN THE SPECIFICATIONS. ALL SEWER IMPROVEMENTS MUST COMPLY WITH THE TOWN OF WAREHAM SEWER DEPARTMENT, MWRA AND ANY APPLICABLE AUTHORITY HAVING JURISDICTION, INCLUDING (BUT NOT LIMITED TO) MATERIALS, DIMENSIONS AND ACCESS COVERS. CONTRACTOR MUST SUBMIT SHOP DRAWINGS FOR APPROVAL BY ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

THE NEXT STRUCTURE MUST BE CAST IRON AND IN ACCORDANCE WITH 284CMR. ALL WATER LINES MUST BE CEMENT LINED DUCTILE IRON PIPE (CLDIP). ALL WATER MAIN IMPROVEMENTS MUST COMPLY WITH THE TOWN OF WAREHAM WATER DEPARTMENT AND ANY APPLICABLE AUTHORITY HAVING JURISDICTION, INCLUDING (BUT NOT LIMITED TO) MATERIALS, DIMENSIONS AND ACCESS COVERS. CONTRACTOR TO PROVIDE SHOP DRAWINGS AND SUBMITTALS TO THE ENGINEER OF RECORD FOR APPROVAL FOR ALL WATER IMPROVEMENTS AND APPURTENANCES INCLUDING

ALL PIPES FROM BUILDING TO GREASE TRAP/INTERCEPTOR AND FROM GREASE TRAP/INTERCEPTOR TO

PROPOSED GAS, ELECTRIC, CABLE AND DATA UTILITIES ARE SHOWN SCHEMATICALLY AND ARE PROPOSED TO BE UNDERGROUND. OWNER AND CONTRACTOR MUST COORDINATE FINAL DESIGN WITH APPROPRIATE UTILITY COMPANIES. ALL WORK MUST BE IN ACCORDANCE WITH EACH UTILITY COMPANY'S STANDARDS AND DETAILS, AS WELL AS LOCAL AND FEDERAL REGULATIONS. THIS INCLUDES BUT IS NOT LIMITED TO POLES, TRANSFORMERS, PULL BOXES, CONCRETE PADS, CONCRETE ENCASEMENTS AND CONDUITS. CONNECTION POINTS FOR ELECTRIC AND TELECOM UTILITIES, AT THE EXISTING INFRASTRUCTURE. ARE CURRENTLY SHOWN AS UNDERGROUND UTILITIES. THESE UTILITIES MAY BE

UNDERGROUND OR OVERHEAD AND MUST BE COORDINATED WITH NATIONAL GRID/APPROPRIATE UTILITY

BUT NOT LIMITED TO PIPES, VALVES, FITTINGS, HEAT ENCLOSURES, AND BACKFLOWS.

AUTHORITY PRIOR TO CONSTRUCTION.

SITE LIGHTING (TEMPORARY AND PERMANENT) MUST BE DIRECTED AWAY FROM AND SHIELDED FROM ENVIRONMENTALLY SENSITIVE AREAS AND ABUTTING LANDS. EXACT LOCATIONS OF LIGHT POLE MUST BE COORDINATED WITH OTHER UTILITIES AND MUST BE LOCATED WITHIN THE STREET RIGHTS OF WAY. FINAL LIGHTING AND CONDUIT LOCATIONS BY OTHERS.

ABBREVIATIONS LEGEND

ADA AMERICANS WITH DISABILITY ACT N/F NOW OR FORMERLY AHJ AUTHORITY HAVING JURISDICTION OHW OVERHEAD WIRE AP ASSESSOR'S PLAT PE POLYETHYLENE PROPERTY LINE BC BOTTOM OF CURB PR PROPOSED BT BOTTOM OF TESTHOLE PVC POLYVINYL CHLORIDE

R RADIUS

R&D REMOVE AND DISPOSE

RL ROOF LEADER

ROW RIGHT-OF-WAY

SED SEDIMENT FOREBAY

SFL STATE FREEWAY LINE

SHL STATE HIGHWAY LINE

SG SLAB ON GRADE ELEVATION

SFM SEWER FORCE MAIN

SMH SEWER MANHOLE

SNDF SAND FILTER

SS SIDE SLOPE

TC TOP OF CURB

TD TRENCH DRAIN

TF TOP OF FOUNDATION

TW TOP OF WALL (FINISHED

DETENTION SYSTEM

INFILTRATION SYSTEM

GRADE AT TOP OF WALL)

STA STATION

TRANS TRANSITION

TYP TYPICAL

UDS UNDERGROUND

UIS UNDERGROUND

UP UTILITY POLE

WQ WATER QUALITY

WO WALKOUT ELEVATION

SF SQUARE FOOT

S SLOPE

SD SUBDRAIN

RCP REINFORCED CONCRETE PIPE

- BIO BIORETENTION BS BASEMENT SLAB ELEVATION
- BW FINISHED GRADE AT BOTTOM OF WALL CB CATCH BASIN (C) CALCULATED
- (CA) CHORD ANGLE CLDIP CONCRETE LINED DUCTILE IRON PIPE CO CLEAN OUT
- CONC CONCRETE (D) DEED

BIT BITUMINOUS (BERM)

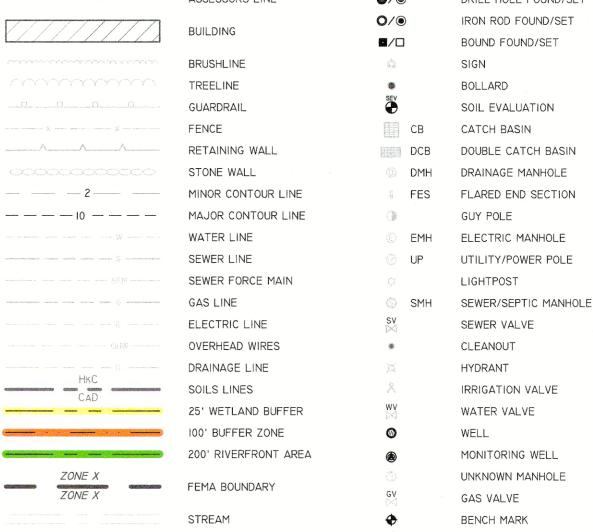
CENTERLINE

- DCB DOUBLE CATCH BASIN DI DROP INLET DMH DRAINAGE MANHOLE
- DP DETENTION POND ELEV ELEVATION
- EOP EDGE OF PAVEMENT ESC EROSION AND SEDIMENT CONTROL EX EXISTING
- FES FLARED END SECTION FFE FINISH FLOOR ELEVATION
- GS GARAGE SLAB ELEVATION GWT GROUND WATER TABLE
- HW HEADWALL HC HIGH CAPACITY CATCH BASIN GRATE
- HDPE HIGH DENSITY POLYETHYLENE INV INVERT
- IP INFILTRATION POND
- LF LINEAR FEET LOD LIMIT OF DISTURBANCE LP LIGHT POLE
- (M) MEASURED MEP MECHANICAL/ELECTRICAL/ PLUMBING
- **ENGINEER**

EXISTING LEGEND

(AS SHOWN ON PROPOSED PLANS)

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS PROPERTY LINE NAIL FOUND/SET ASSESSORS LINE DRILL HOLE FOUND/SET



---- STATE HIGHWAY LINE STATE FREEWAY LINE _____ ↑ GWO ↑ _____ GROUNDWATER OVERLAY

GROUNDWATER RECHARGE AREA → ↑ GWR ↑ GROUNDWATER RESERVOIF

----- ↑ NHA ↑------ NATURAL HERITAGE COMMUNITY WELLHEAD PROTECTION NON-COMMUNITY WELLHEAD PROTECTION

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS PROPERTY LINE - BUILDING SETBACKS —O——O———— CHAINLINK FENCE $--\rightarrow --\rightarrow --\rightarrow --\rightarrow -$ SWALE GUARDRAIL SEE LAYOUT AND MATERIALS NOTE 8.

RETAINING WALL MINOR CONTOUR LINE

-(308)SPOT ELEVATION

EDGE OF PAVEMENT BITUMINOUS BERM CONCRETE CURE (MONOLITHIC)

FREEDRICK SCHOOL SCHOOL SECURIS SECURIS GROUND GROUND GROUND SCHOOL

(4W) 4" PAINTED WHITE MARKINGS

AND MUTCD REGULATIONS AND REQUIREMENTS.

AND MUTCD REGULATIONS AND REQUIREMENTS. CROSSWALK PAVEMENT MARKINGS. SOLID 2' WHITE LINES

(4DY) 4" EPOXY RESIN PAVEMENT MARKINGS- DOUBLE YELLOW

(4W45) 4" WHITE STRIPING 2' ON CENTER AT 45°

(6W) 6" WHITE EPOXY RESIN PAVEMENT MARKINGS

(12W) STOP LINE (REFERENCE MUTCD SECTION 3B.16)

REQUIREMENTS. VAN ADA SPACE PAVEMENT MARKINGS MUST COMPLY WITH ALL ADA

YIELD LINE (REFERENCE MUTCD SECTION 3B.16)

SITE CALLOUTS LEGEND

6" WHITE EPOXY RESIN PAVEMENT MARKINGS-SKIP PATTERN

ADA SPACE PAVEMENT MARKINGS MUST COMPLY WITH ALL ADA ADA CURB RAMP MUST COMPLY WITH ALL ADA REGULATIONS AND

SPACED 4' OC (REFERENCE MUTCD SECTION 3B.18)

CONCRETE CURB BUILDING FOOTPRINT BUILDING OVERHANG

ASPHALT PAVEMENT HEAVY DUTY ASPHALT

HEAVY DUTY CONCRETE CONCRETE

SAWCUT LINE 1111111111111111111

ASPHALT SIDEWALK

ACCESSIBLE PARKING SPACE

BUILDING INGRESS/EGRESS

SINGLE LIGHT DOUBLE LIGHT OVERHANGING LIGHT

SYMBOLS

NOTE: THIS PLAN MUST BE REPRODUCED IN COLOR

UTILITY NOTE:

ALL UNDERGROUND UTILITIES SHOWN ON THESE PLANS WERE PROVIDED BY OTHERS AND ARE APPROXIMATE ONLY. LOCATIONS MUST BE DETERMINED IN THE FIELD BEFORE EXCAVATION, BLASTING, UTILITY INSTALLATION, BACKFILLING, GRADING, PAVEMENT RESTORATION. AND ALL OTHER SITE WORK. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THESE DOCUMENTS. CONTACT DIG SAFE A MINIMUM OF 72 WORKING HOURS PRIOR TO ANY CONSTRUCTION AT 8II. DIG SAFE IS RESPONSIBLE FOR CONTACTING MEMBER UTILITY COMPANIES. DIG SAFE MEMBER UTILITY COMPANIES ARE RESPONSIBLE TO MARK ONLY THE FACILITIES THAT THEY OWN OR MAINTAIN. NON DIG SAFE MEMBER COMPANIES ARE NOT NOTIFIED BY DIG SAFE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE AND NOTIFY IF ANY PRIVATELY OWNED OR NON DIG SAFE MEMBER UTILITIES ARE IN THE AREA.

PER THE CODE OF FEDERAL REGULATIONS - TITLE 29, PART 1926 IT IS THE SITE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ACCURATE UNDERGROUND UTILITY LINE LOCATIONS FROM THE UTILITY COMPANIES, UTILITY OWNERS AND, OR VIA UNDERGROUND UTILITY LOCATION EQUIPMENT AS NEEDED TO ESTABLISH ACCURATE LOCATIONS PRIOR TO ANY EXCAVATION. THE USE OF PROFESSIONAL UTILITY LOCATING COMPANIES PRIOR TO ANY EXCAVATION IS RECOMMENDED.

DIPRETE ENGINEERING IS NOT A PROFESSIONAL UTILITY LOCATION COMPANY, AND IS NOT RESPONSIBLE FOR UNDERGROUND UTILITIES, DEPICTED OR NOT, EITHER IN SERVICE OR ABANDONED. ANY SIZES, LOCATIONS, EXISTENCE, OR LACK OF EXISTENCE OF UTILITIES SHOWN ON THESE PLANS SHOULD BE CONSIDERED APPROXIMATE UNTIL VERIFIED BY A PROFESSIONAL UTILITY LOCATION COMPANY. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED.

ELECTRIC, TELEPHONE, CABLE SEDIMENTATION BARRIER, SILT

FENCE, COMPOST SOCK OR APPROVED EQUAL SLOPES STEEPER THAN 3:1 (2:1 OR I:I SLOPES) UNDERGROUND INFILTRATION OUTLINE

POND ACCESS

DRAINAGE LINE

WATER LINE

HYDRANT ASSEMBLY

WATER SHUT OFF

THRUST BLOCK

LIMIT OF DISTURBANCE/

LIMIT OF CLEARING

SEWER LINE

PERFORATED SUBDRAIN

SEWER FORCE MAIN

GAS LINE

OVERHEAD WIRE

_____ S ____

STREAM FLOW DIRECTION

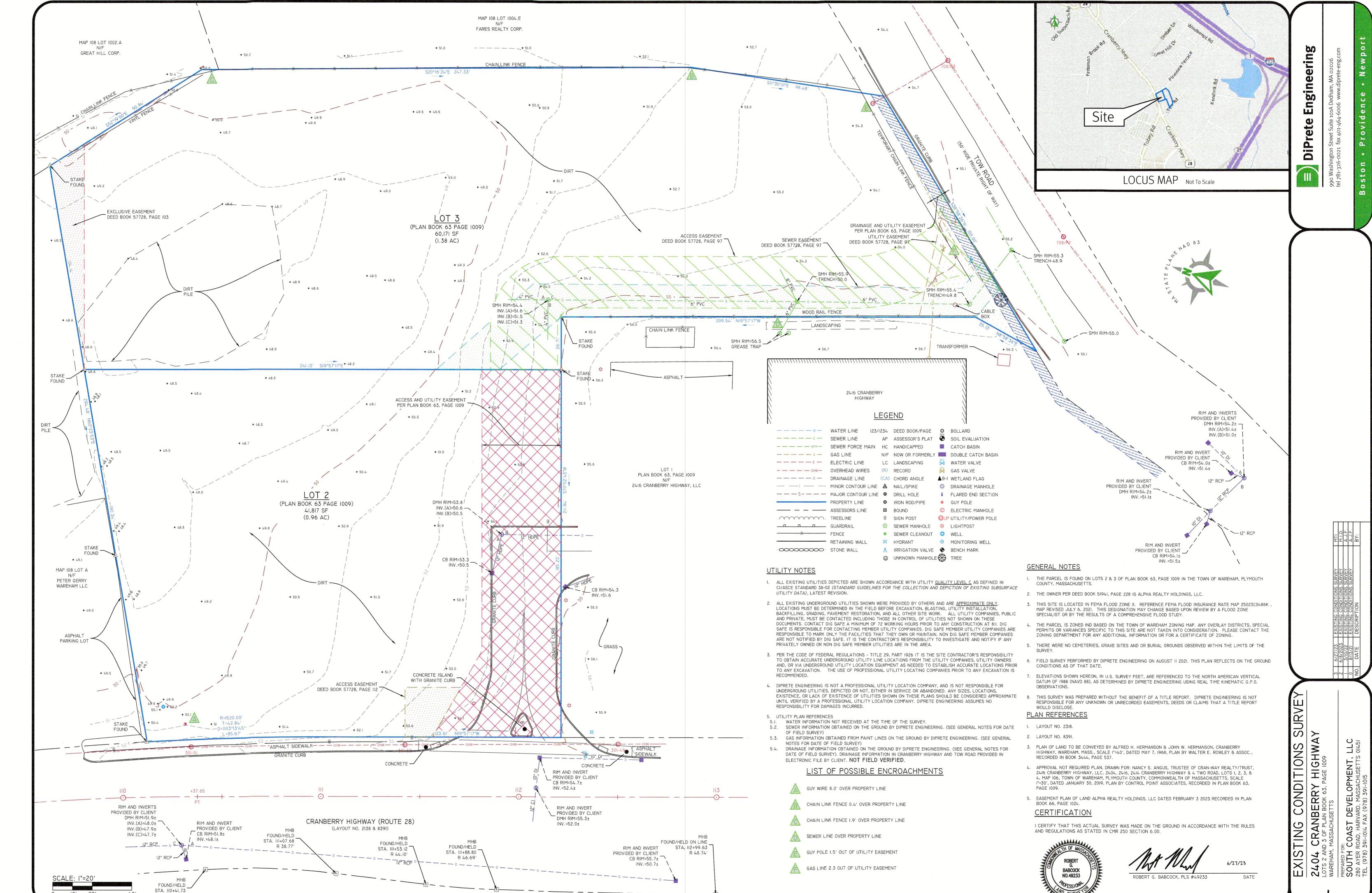
SAND FILTER STORMTECH ISOLATOR ROW

CATCH BASIN DOUBLE CATCH BASIN

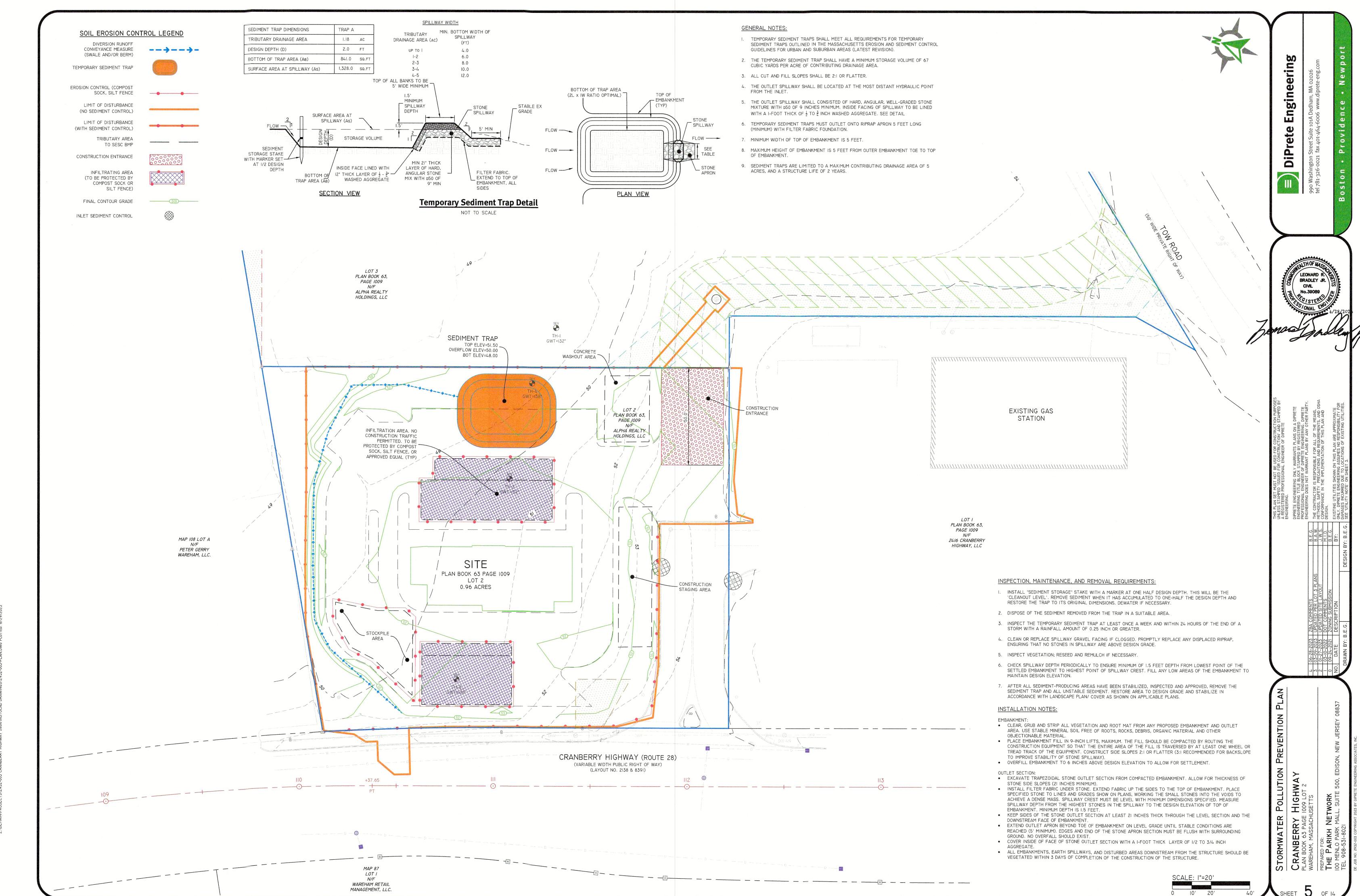
DRAIN MANHOLE FLARED END SECTION

HEADWALL SEWER MANHOLE

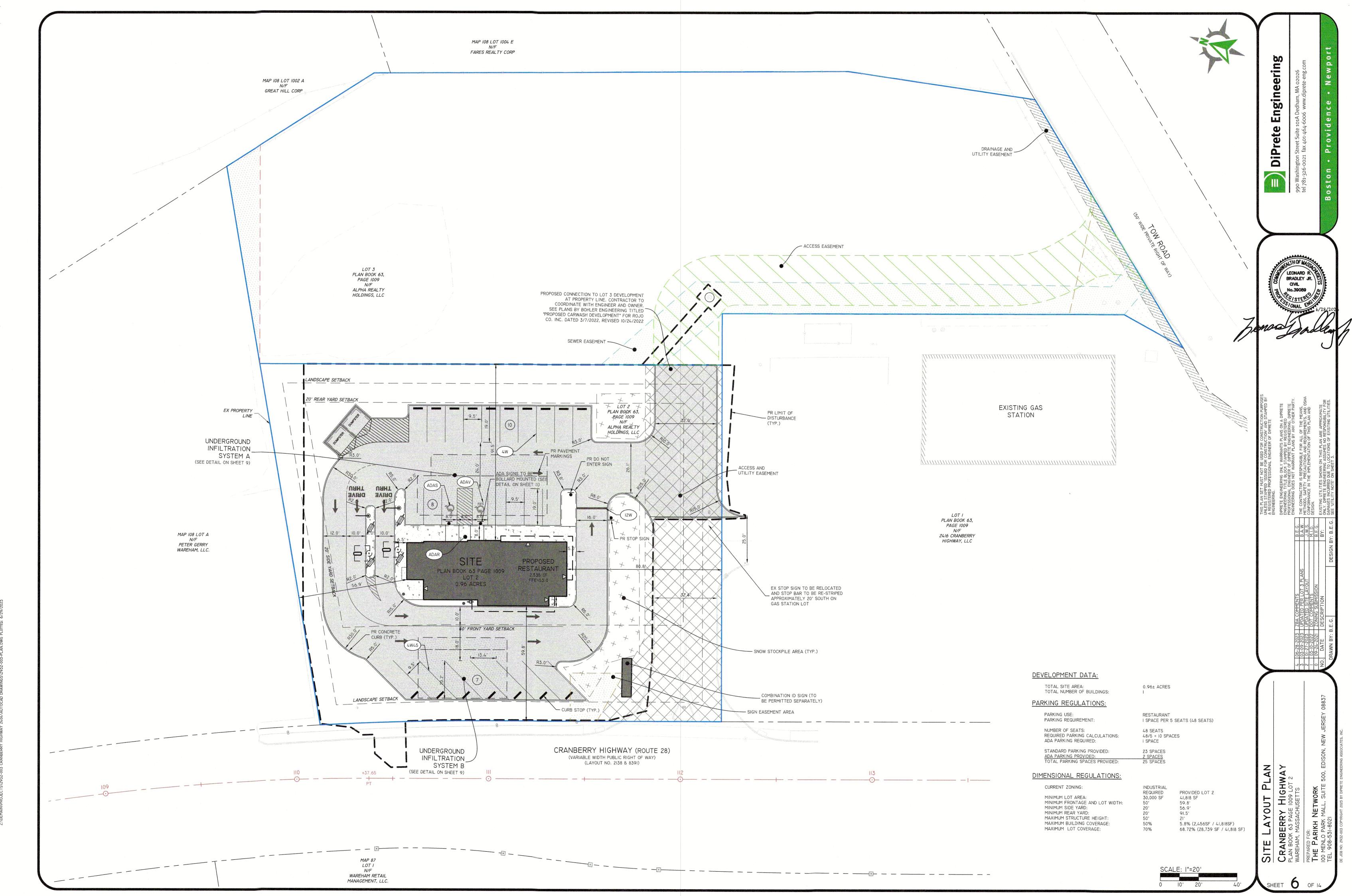
9

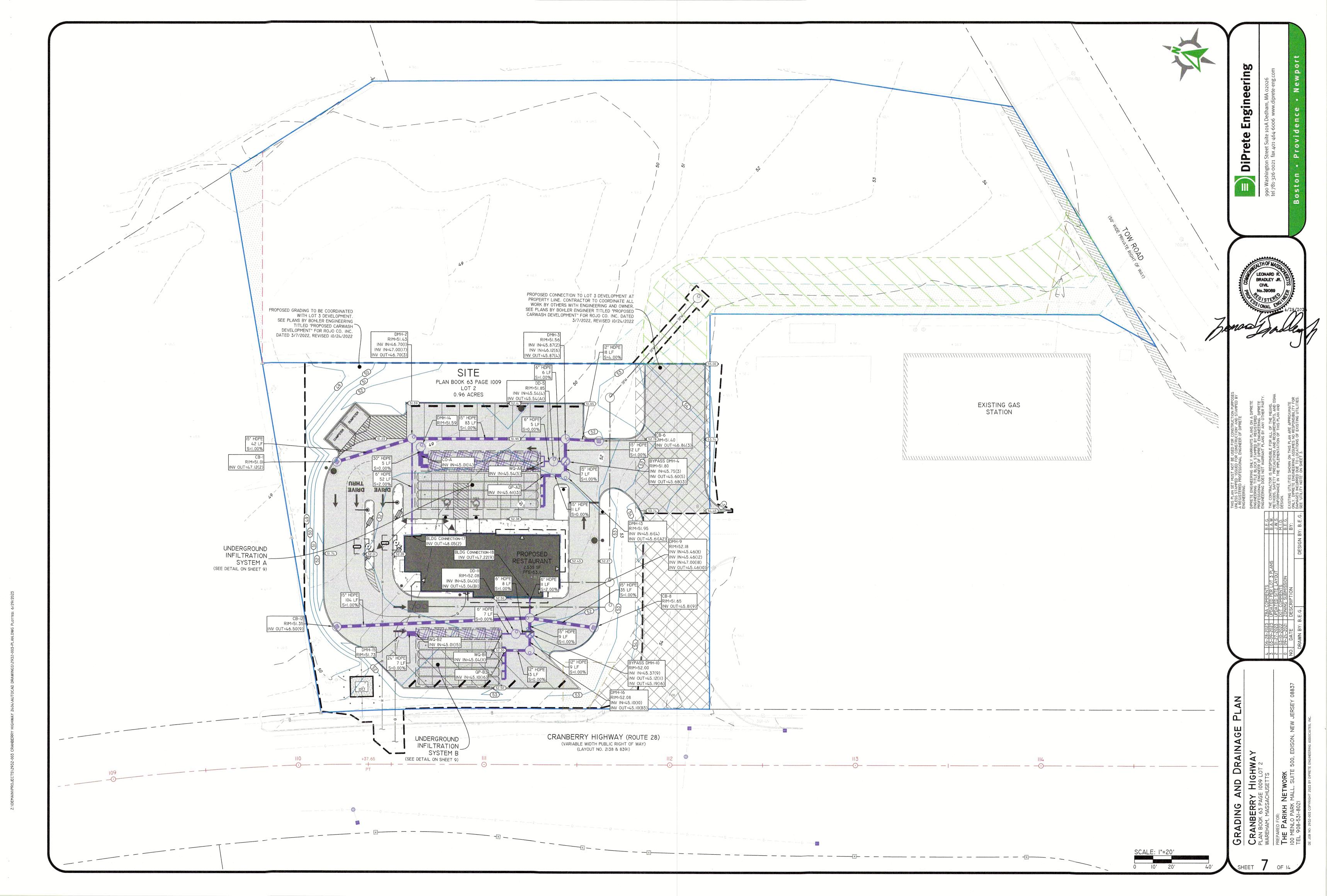


R 36.59'

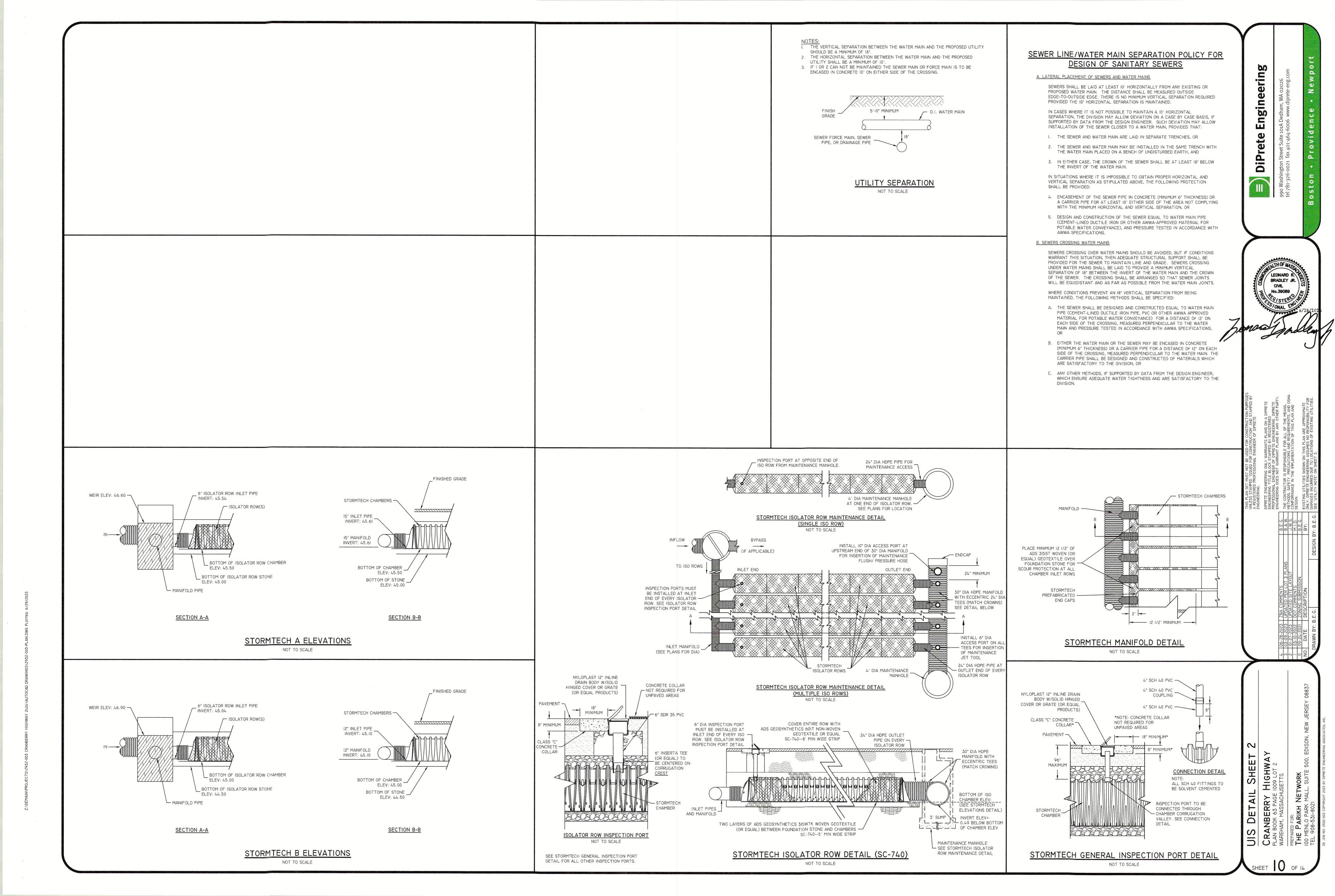


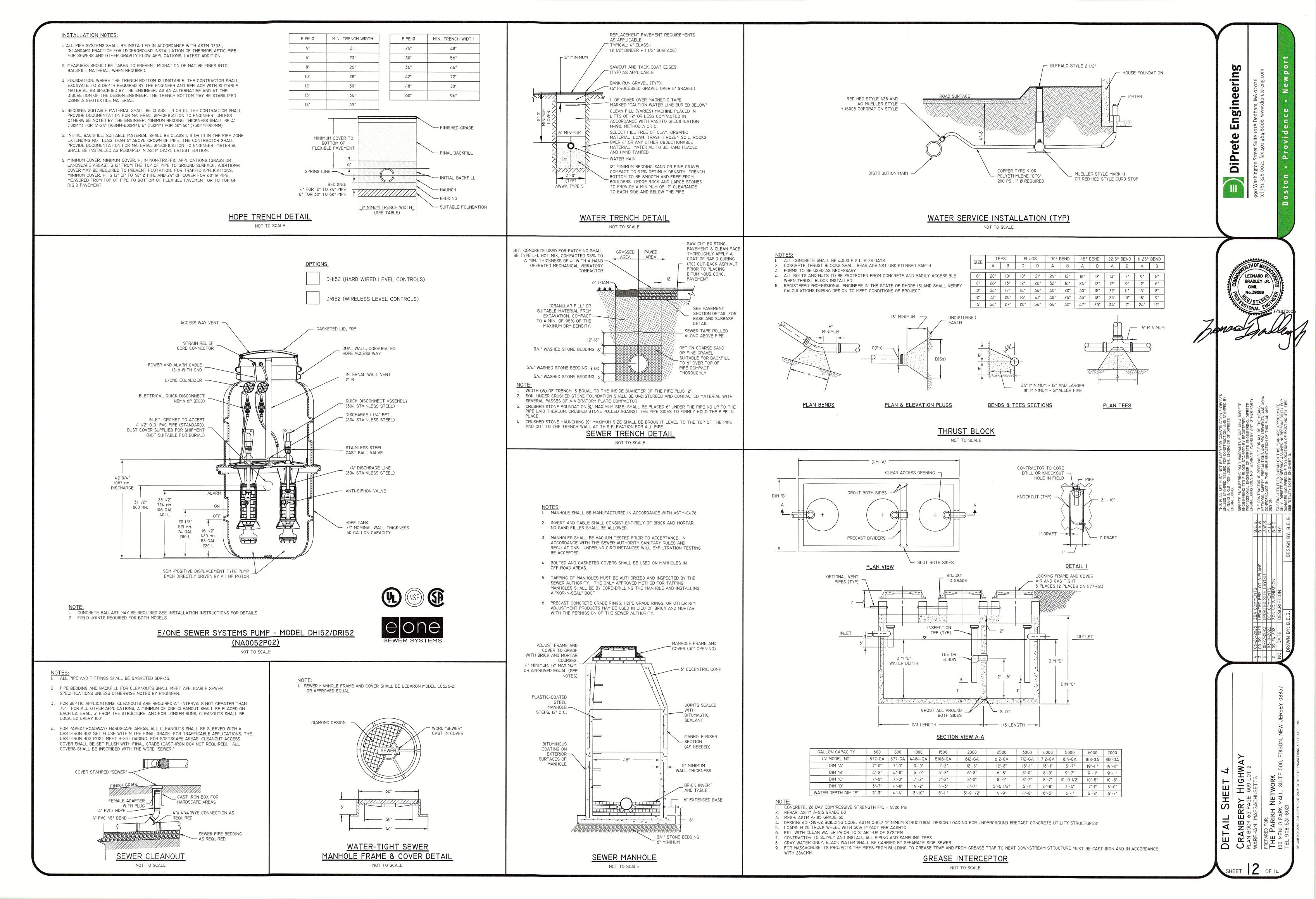
TANEMARKING TOTAL SOZO SOZO SOZO SECULIONES SECULIA SE

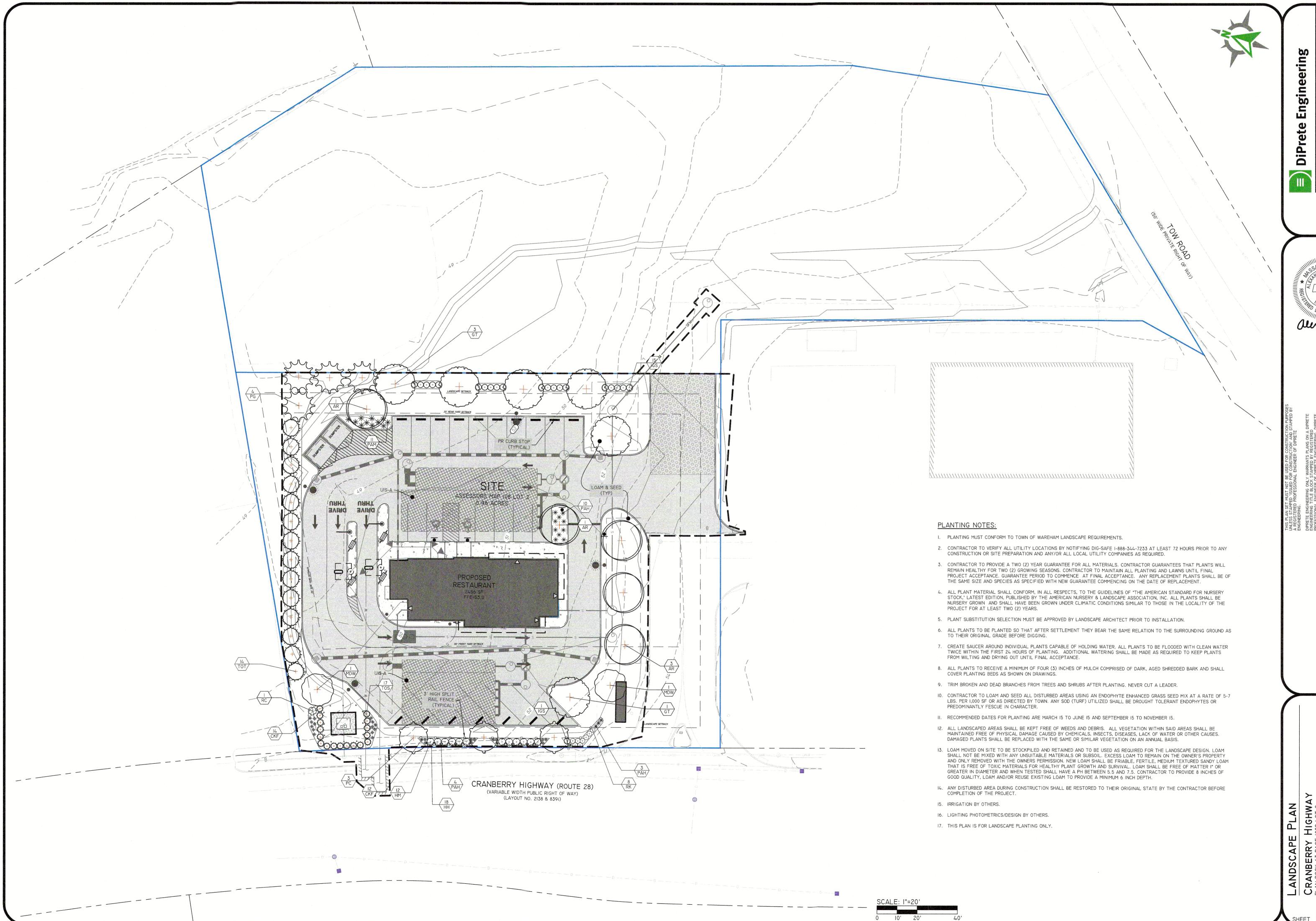




Z:\DEMAIN\PROJECTS\2932-003 CRANBERRY HIGHWAY 2404\AUTOCAD DRAWINGS\2932-003-PLAN.DWG PLOTTED: 6/29/2







1040 LANDSCAPED BUFFERS

1041 LANDSCAPED BUFFERS BETWEEN LAND USES LANDSCAPED BUFFERS SHALL BE PROVIDED BETWEEN LAND USES AS SPECIFIED IN SECTION 1042, AND BETWEEN RESIDENTIAL DEVELOPMENTS AND COLLECTOR STREETS OR ARTERIALS AS SPECIFIED IN SECTION 1043. EXISTING WOODLANDS, WHICH MEET THE MINIMUM REQUIREMENTS OF EACH SECTION, MAY SUBSTITUTE FOR LANDSCAPING

1042 MINIMUM LANDSCAPED BUFFER THE FOLLOWING TABLE SETS FORTH THE MINIMUM REQUIRED ADDITIONAL LANDSCAPED BUFFER BETWEEN A PROPOSED USE AND AN EXISTING ADJACENT USE.

ADJACENT INDUSTRIAL LANDSCAPE USE 10 FT BUFFER IS PROPOSED.

1050 LANDSCAPE STANDARDS AND SPECIFICATIONS THE FOLLOWING STANDARDS AND SPECIFICATIONS, SHALL APPLY FOR PLANT MEASUREMENTS, INSTALLATION TECHNIQUES AND MAINTENANCE:

1051 PLANT STANDARDS AND SPECIFICATIONS

1051.1 THE LANDSCAPE CONTRACTOR SHALL FURNISH AND INSTALL AND/OR DIG, BALL, BURLAP, AND TRANSPLANT ALL PLANT MATERIALS LISTED ON THE PLANT SCHEDULE. BARE-ROOT IS TYPICALLY NOT PERMITTED FOR ANY TREE.

1051.2 PLANT MATERIALS SHALL CONFORM TO THE REQUIREMENTS DESCRIBED IN THE LATEST EDITION OF AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN. PLANTS SHALL BE NURSERY GROWN.

1051.3 PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED IN THE PLANT SCHEDULE. CALIPER MEASUREMENTS SHALL BE TAKEN SIX (6) INCHES ABOVE GRADE FOR TREES UNDER FOUR (4) INCHES IN DIAMETER AND TWELVE (I2) INCHES ABOVE GRADE FOR TREES FOUR (4) INCHES IN DIAMETER AND LARGER.

MINIMUM BRANCHING HEIGHT FOR ALL SHADE TREES SHALL BE SIX (6) FEET MINIMUM SIZE FOR SHADE TREES SHALL BE TWO AND ONE HALF (2 | /2) INCHES IN DIAMETER AND MINIMUM SIZE FOR EVERGREEN TREES SHALL BE BETWEEN SIX (6) AND EIGHT (8) FEET IN HEIGHT

PROPOSED PLANT SCHEDULE ITEMS MEET THE ABOVE REQUIREMENTS WHERE FEASIBLE.

MINIMUM SIZE FOR SHRUBS SHALL BE THREE (3) FEET IN HEIGHT.

1051.4 A PROFESSIONAL HORTICULTURIST/NURSERYMAN SHALL BE CONSULTED TO DETERMINE THE PROPER TIME TO MOVE AND INSTALL PLANT MATERIAL SO THAT STRESS TO THE PLANT IS MINIMIZED. PLANTING OF DECIDUOUS MATERIAL MAY BE CONTINUED DURING WINTER MONTHS PROVIDED THERE IS NO FROST IN THE GROUND AND FROST-FREE TOPSOIL PLANTING MIXTURES

1051.5 A LANDSCAPE CONTRACTOR SHALL EXCAVATE ALL PLANT PITS, VINE PITS, HEDGE TRENCHES, AND SHRUB BEDS AS FOLLOWS: I. ALL PITS SHALL BE GENERALLY CIRCULAR IN OUTLINE, WITH VERTICAL SIDES. THE TREE PIT SHALL BE DEEP ENOUGH TO ALLOW ONE-EIGHTH (I /8) OF THE BALL TO BE ABOVE THE EXISTING

GRADE. PLANTS SHALL REST ON UNDISTURBED EXISTING SOIL OR WELL-COMPACTED BACKFILL. ON EVERY SIDE THE TREE PIT MUST BE A MINIMUM OF NINE (9) INCHES LARGER THAN THE BALL OF 2. IF AREAS ARE DESIGNATED AS SHRUB BEDS OR HEDGE TRENCHES, THEY SHALL BE CULTIVATED TO AT LEAST EIGHTEEN (18) INCHES IN DEPTH. AREAS DESIGNATED FOR GROUND COVERS

AND VINES SHALL BE CULTIVATED TO AT LEAST TWELVE (12) INCHES IN DEPTH. 1051.6 EACH TREE, SHRUB, OR VINE SHALL BE PRUNED IN AN APPROPRIATE MANNER, IN ACCORDANCE WITH ACCEPTED STANDARD PRACTICE.

1051.7 ALL TRENCHES AND SHRUB BEDS SHALL BE EDGED AND CULTIVATED TO THE LINES SHOWN ON THE DRAWING. THE AREAS AROUND ISOLATED PLANTS SHALL BE EDGED AND CULTIVATED TO THE FULL DIAMETER OF THE PIT. SOD THAT HAS BEEN REMOVED AND STACKED SHALL BE USED TO TRIM THE EDGES OF ALL EXCAVATED AREAS TO THE NEAT LINES OF THE PLANT PIT SAUCERS, THE EDGES OF SHRUB AREAS, HEDGE TRENCHES, AND VINE POCKETS.

1051.8 AFTER CULTIVATION, ALL PLANT MATERIALS SHALL BE MULCHED WITH A LAYER BETWEEN TWO (2) AND THREE (3) INCHES DEEP OF TAN BARK, PEAT MOSS, OR ANOTHER MATERIAL OVER THE ENTIRE AREA OF THE BED, OR SAUCER.

TOWN LANDSCAPE REGULATIONS MUST BE FOLLOWED IF THERE ANY VARIATIONS BETWEEN THE PROPOSED PLANTING AND TOWN REGULATIONS.

1052 OTHER LANDSCAPE STANDARDS AND SPECIFICATIONS

1052.1 EARTHEN BERMS SHALL ONLY BE USED IN CONJUNCTION WITH VEGETATIVE PLANTING.

NOT APPLICABLE. NO BERMS ARE PROPOSED.

1052.2 EXISTING TREES AND WOODLANDS SHALL BE PRESERVED TO THE GREATEST EXTENT POSSIBLE FACTORS TO BE CONSIDERED SHALL INCLUDE THE SIZE, AGE, CONDITION, HABITAT OR HISTORICAL SIGNIFICANCE OF THE TREE. TREES TO BE PRESERVED SHALL BE SELECTED EARLY IN THE PROJECT PLANNING PROCESS PRIOR TO ESTABLISHING THE SITE LAYOUT. SITE GRADING SHALL BE MINIMIZED IN THOSE AREAS TO PREVENT DAMAGE TO THE PRESERVED TREES. EFFORTS SHALL BE UNDERTAKEN TO PROTECT THE TREES DURING CONSTRUCTION.

NOT APPLICABLE. EXISTING SITE IS A CLEARED VACANT LOT.

1052.3 VEGETATION IN FLOODPLAINS, STEEP SLOPES, AND WETLANDS AREAS SHALL REMAIN UNDISTURBED TO THE GREATEST EXTENT POSSIBLE. ANY ALTERATION OF THESE AREAS SHALL BE IN CONFORMANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

1052.4 LANDSCAPE PLANS SHALL PROVIDE FOR A MIX OF EVERGREEN, ORNAMENTAL, SHADE TREES, AND SHRUBS TO PROVIDE ADEQUATE VISUAL AND NOISE BUFFER BETWEEN ADJACENT LAND USES. FENCES, BERMS, AND OTHER STRUCTURAL FEATURES MAY ALSO BE USED TO PROVIDE AN ADEQUATE BUFFERING BETWEEN THE LAND

SHRUBS SHALL FORM A CONTINUOUS VISUAL SCREEN OF AT LEAST THREE (3) FEET IN HEIGHT AT THE TIME OF PLANTING. 2. BERMS SHALL BE AT LEAST TWO AND ONE-HALF (21/2) FEET HIGH AND SHALL HAVE A MINIMUM THREE TO ONE (3:1) SIDE SLOPE 3. EVERY THIRTY-FIVE (35) LINEAR FEET OF LANDSCAPING SHALL CONTAIN ONE (I) SHADE TREE AND

FIVE (5) SHRUBS. TWO (2) ORNAMENTAL OR TWO (2) EVERGREEN TREES MAY SUBSTITUTE FOR ONE (I) SHADE TREES.

PLANTING ALONG THE ADJACENT LOTS COMPRISED OF SHADES TREES, EVERGREENS AND 3' HT MIN SHRUBS IS PROPOSED WHERE FEASIBLE.

1052.5 PERIMETER LANDSCAPES SHALL BE PROVIDED TO SEPARATE COMMERCIAL, OFFICE, AND INDUSTRIAL USES FROM THE STREET AT LEAST A TEN (10) FOOT STRIP SHALL BE LANDSCAPED WITH TREES, SHRUBS, FENCES, BERMS OR OTHER MEANS DEEMED ACCEPTABLE BY THE BOARD OR

PLANTING ALONG THE ADJACENT LOTS COMPRISED OF SHADES TREES, EVERGREENS AND 3' HT MIN SHRUBS IS PROPOSED WHERE FEASIBLE.

1052.6 PRESERVATION OF EXISTING LARGE TREES CAN BE USED TO REDUCE NEW PLANTINGS REQUIRED BY THIS ARTICLE AND THE BOARD OR OFFICIAL. EXISTING WOODLANDS CAN ALSO PROVIDE BUFFERS THAT CONFORM TO SECTION 1040.

NOT APPLICABLE. EXISTING SITE IS A CLEARED VACANT LOT.

1060 PARKING LOTS 1061 VISIBILITY FROM PUBLIC ROADWAYS

WHEN A PARKING LOT IS LOCATED ADJACENT TO A PUBLIC STREET, DESIGN ALTERNATIVES SHALL BE IMPLEMENTED TO REDUCE THE LOT'S VISIBILITY FROM THE STREET.

1061.1 ALONG THE PERIMETER OF THE PARKING LOT A LANDSCAPE STRIP SHALL BE PROVIDED PLANTED WITH SHADE TREES AND LOW SHRUBS IN COMPLIANCE WITH SECTION 1040.

THE LANDSCAPE STRIP SHALL PROVIDE A MINIMUM OF ONE (I) SHADE TREE PER EVERY FORTY (40) FEET

OF LOT PERIMETER. WHERE APPROPRIATE, ADDITIONAL SHADE TREES MAY BE NECESSARY TO EFFECTIVELY SHADE/SCREEN THE PARKING LOT IN CASES WHERE QUALITY WOODLANDS EXIST, EXISTING TREES AND SHRUBS SHALL BE

PRESERVED TO PROVIDE THE MINIMUM BUFFERS SET FORTH IN SECTION 1040. PROVIDE ADDITIONAL

PLANTING COMPRISED OF SHADE TREES, SHRUBS, PERENNIALS, ORNAMENTAL GRASSES AND A 3' HIGH FENCE IS PROPOSED ALONG CRANBERRY HIGHWAY.

1061.2 ONE OR MORE OF THE FOLLOWING DESIGN ALTERNATIVES SHALL BE USED FOR ALL PARKING LOTS LOCATED ADJACENT TO PUBLIC STREETS: LANDSCAPE SETBACKS

PROVIDE AT LEAST A TEN (I0) FOOT WIDE LANDSCAPED AREA EXCLUSIVE OF THAT REQUIRED FOR SIDEWALKS OR UTILITY EASEMENTS BETWEEN THE STREET AND THE PARKING LOT TO BE PLANTED WITH SHADE OR ORNAMENTAL TREES, AND AT LEAST A THREE (3) FOOT HIGH EVERGREEN HEDGE, WALL, OR GRADE CHANGES

IN CASES WHERE SUBSTANTIAL GRADING IS NECESSARY AND RESULTS IN A PARKING LOT LOWER IN ELEVATION THAN THE SURROUNDING OR ADJACENT RIGHT-OF-WAY, THE RESULTING EMBANKMENT SHOULD BE PLANTED WITH LOW SHRUBS AND SHADE OR ORNAMENTAL TREES. A MINIMUM OF TEN (I0) FEET OF LANDSCAPING SHOULD BE PROVIDED BETWEEN THE STREET AND THE PARKING LOT.

LANDSCAPE BERMS WHERE FEASIBLE, CREATE AT LEAST A TWO AND ONE-HALF (21/2) FOOT HIGH BERM WITH SLOPES NOT TO EXCEED THREE TO ONE (3:1) FOR PLANTING LAWN, GROUND COVER, OR SHRUBS.

EXISTING WOODLANDS IN CASES WHERE QUALITY WOODLAND EXISTS, PRESERVE EXISTING TREES BETWEEN THE PARKING LOT

AND THE RIGHT OF-WAY. PROVIDE ADDITIONAL EVERGREEN SHRUBS IF NEEDED TO ACHIEVE AN EFFECTIVE VISUAL THE VEGETATION SHOULD BE PRESERVED.

A 10' WIDE LANDSCAPE BUFFER IS PROPOSED ALONG CRANBERRY HIGHWAY AS WELL AS PLANTING COMPRISED OF SHADE TREES, SHRUBS, PERENNIALS, ORNAMENTAL GRASSES AND A 3' HIGH FENCE.

1061.3 SIGHT TRIANGLES SHALL INCLUDE THE AREA ON EACH STREET CORNER THAT IS BOUNDED BY THE LINE WHICH CONNECTS THE SIGHT OR " CONNECTING" POINTS LOCATED ON EACH OF THE RIGHT-OF-WAY LINES OF THE INTERSECTING STREET. THE PLANTING OF TREES OR OTHER PLANTINGS THAT WOULD OBSTRUCT THE CLEAR SIGHT ACROSS THE SIGHT TRIANGLE SHALL BE

1062 INTERIOR LANDSCAPING ENHANCEMENTS

1062.1 A MINIMUM OF FIVE (5) PERCENT INTERIOR LANDSCAPING SHALL BE MAINTAINED FOR THE PURPOSE OF PLANTING SHADE TREES. IN ADDITION, ALL OF THE FOLLOWING DESIGN ALTERNATIVES SHALL BE INCLUDED WHERE APPROPRIATE

PROVIDE A CONTINUOUS LANDSCAPE STRIP BETWEEN EVERY FOUR (4) ROWS OF PARKING. THIS SHOULD BE A MINIMUM OF EIGHT (8) FEET IN WIDTH TO ACCOMMODATE A LOW HEDGE AND SHADE CREATE LARGE PLANTING ISLANDS (OVER SIX HUNDRED (600) SQUARE FEET) TO BE LOCATED

THROUGH THE LOT AND PLANTED WITH SHADE TREES, LOW SHRUBS, AND/OR GROUND COVER. THESE SHOULD PREFERABLY BE LOCATED AT THE ENDS OF PARKING ROWS. 3. PROVIDE PLANTING ISLANDS (A MINIMUM OF NINE (9) FEET WIDE) BETWEEN EVERY TEN (10) TO FIFTEEN (15) SPACES TO AVOID LONG ROWS OF PARKED CARS. EACH OF THESE PLANTING ISLANDS SHOULD PROVIDE AT LEAST ONE (I) SHADE TREE HAVING A CLEAR TRUNK HEIGHT OF AT LEAST SIX (6)

INTERIOR LANDSCAPING CALC PROPOSED PARKING AREA = 5,240 SF

PROPOSED ISLAND AREA = 506 SF PROPOSED INTERIOR LANDSCAPING = 506 / 5,240 = 9.6% (0.096)

>5% INTERIOR LANDSCAPING IS PROPOSED AND IS COMPRISED OF LANDSCAPE ISLANDS AND SHADES

1062.2 WITHIN THE INTERIOR OF THE PARKING LOT, LANDSCAPING SHOULD BE USED TO DELINEATE VEHICULAR AND PEDESTRIAN CIRCULATION PATTERNS. CLEAR AND LEGIBLE SIGNS, DIFFERENT COLOR AND TEXTURE PAVING MATERIALS, RAISED AREAS, AND OTHER TECHNIQUES SHOULD BE USED TO FURTHER DIRECT THE FLOW OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC WITHIN THE LOT. MECHANICAL EQUIPMENT, TRASH, AND LOADING AREAS SHALL BE SCREENED BY WALLS, FENCES, LANDSCAPING OR A COMBINATION OF THE LATTER.

LANDSCAPING IS PROPOSED TO DELINEATE VEHICULAR AND PEDESTRIAN CIRCULATION PATTERNS WITHIN THE INTERIOR OF THE PARKING LOT. ALSO PROPOSED ARE CLEAR AND LEGIBLE SIGNS, DIFFERENT COLOR AND TEXTURE PAVING MATERIALS, RAISED AREAS, AND OTHER TECHNIQUES SHOULD BE USED TO FURTHER DIRECT THE FLOW OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC WITHIN THE LOT. MECHANICAL EQUIPMENT, TRASH, AND LOADING AREAS ARE PROPOSED TO BE SCREENED BY WALLS AND LANDSCAPING

1062.3 PARKING AREAS CONTAINING TWENTY-FIVE (25) OR MORE PARKING SPACES SHALL BE DESIGNED WITH LANDSCAPED ISLANDS TO CONTAIN AT LEAST ONE TREE PER EIGHT (8) CARS. SUCH TREES SHALL BE AT LEAST TWO INCHES CALIPER OR LARGER AT THE TIME OF PLANTING AND SHALL BE SURROUNDED BY AT LEAST FIFTY (50) SQUARE FEET OF UNPAVED SOIL PER TREE.

25 PARKING SPACES ARE PROPOSED. LANDSCAPED ISLANDS WITH 2 INCH MIN CAL TREES SURROUNDED BY AT LEAST 50 SF SOIL ARE ALSO PROPOSED.

1062.4 EACH TREE OF THE TYPE DESCRIBED IN SECTION 1062.3 SHALL BE PRESUMED TO SHADE A CIRCULAR AREA HAVING A RADIUS OF FIFTEEN (15) FEET WITH THE TRUNK AT THE CENTER AND USING THIS STANDARD, TWENTY (20) PERCENT OF THE PAVED AREA MUST BE SHADED.

PROPOSED PARKING AREA = 5,240 SF REQUIRED SHADE AREA = 5,240 X 0.20 = 1,048 SF PROPOSED SHADE TREE AREA = 3 @ 15' FT RADIUS (706.5 SF EACH) 3 X 706.5 SF = 2,119.5 SF PROPOSED SHADE AREA = 2,119.5 / 5,240 = 40.4% (0.404) > 20%

1062.5 NO PAVING MAY BE PLACED WITHIN A FOUR (4) FOOT RADIUS (MEASURED FROM THE CENTER OF THE TRUNK) OF ANY TREE RETAINED OR PLANTED TO COMPLY WITH THE PROVISIONS OF THIS SECTION.

NO PAVING IS PROPOSED TO BE PLACED WITHIN A FOUR (4) FOOT RADIUS (MEASURED FROM THE CENTER OF THE TRUNK) OF ANY TREE PLANTED.

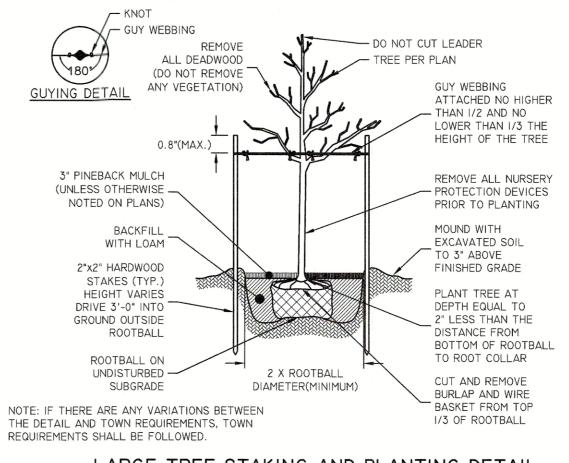
1062.6 IN ORDER TO PRESERVE LANDSCAPING ISLANDS FROM DAMAGE BY PARKING CARS AND SNOW REMOVAL, ALL LANDSCAPED OPEN SPACES SHALL BE PROVIDED WITH BUMPER OVERHANG AREAS FOR PARKING SPACES ADJACENT TO LANDSCAPED ISLANDS TO PREVENT VEHICLE OVERHANG ABOVE THE LANDSCAPED (NON-PAVED) AREA.

CURB STOPS ARE PROPOSED IN ORDER TO PRESERVE LANDSCAPING ISLANDS FROM DAMAGE BY PARKING CARS AND SNOW REMOVAL.

1070 MAINTENANCE OF LANDSCAPING BUFFERS

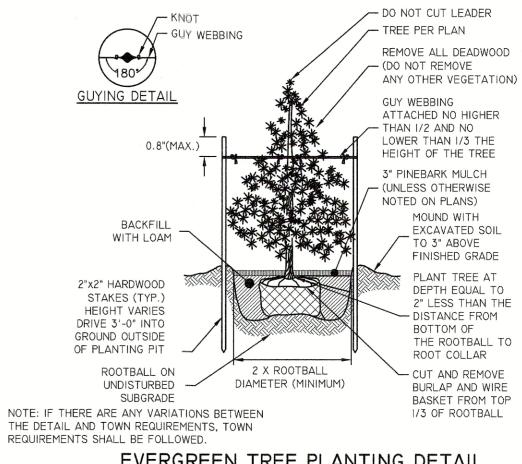
TO ENSURE THE IMPLEMENTATION AND LONG-TERM MAINTENANCE OF LANDSCAPING PLANTINGS AND REQUIREMENTS, THE BOARD MAY REQUIRE ONE OR MORE OF THE FOLLOWING: A TWO (2) YEAR GUARANTEE ON ALL NEW PLANT MATERIAL. IF ANY REQUIRED TREE OR SHRUB DIES WITHIN THIS PERIOD OF TIME, IT SHALL BE REPLACED. REQUIRE THE DEVELOPER TO POST A PERFORMANCE OR MAINTENANCE BOND CONDITIONED UPON

SATISFACTORY IMPLEMENTATION OF THE LANDSCAPE PLAN. REQUIRE THE DEVELOPER/OWNER/APPLICANT TO MAINTAIN A LONG-TERM MAINTENANCE AGREEMENT WITH A LANDSCAPE COMPANY TO MAINTAIN THE LANDSCAPING ON THE SITE.



LARGE TREE STAKING AND PLANTING DETAIL (2" CALIPER AND GREATER)

NOT TO SCALE



EVERGREEN TREE PLANTING DETAIL (4'-0" HIGH AND GREATER)

NOT TO SCALE

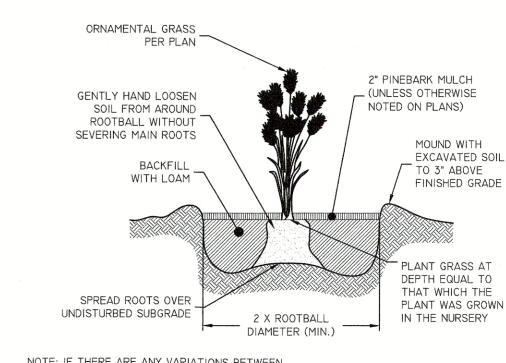
REMOVE ALL DEADWOOD - SHRUB PER PLAN (DO NOT REMOVE ANY OTHER BACKFILL VEGETATION) WITH LOAM 3" PINEBARK MULCH MOUND WITH (UNLESS OTHERWISE __ EXCAVATED SOIL NOTED ON PLANS) TO 3* ABOVE FINISHED GRADE GENTLY HAND LOOSEN PLANT SHRUB AT SOIL FROM AROUND DEPTH EQUAL TO 2" LESS ROOTBALL WITHOUT THAN THE DISTANCE FROM SEVERING MAIN ROOT BOTTOM OF THE ROOTBALL TO THE ROOT COLLAR 2 X ROOTBALL DIAMETER (MIN.) SPREAD ROOTS OVER UNDISTURBED SUBGRADE NOTE: IF THERE ARE ANY VARIATIONS BETWEEN

CONTAINER GROWN SHRUB PLANTING DETAIL

THE DETAIL AND TOWN REQUIREMENTS, TOWN

REQUIREMENTS SHALL BE FOLLOWED.

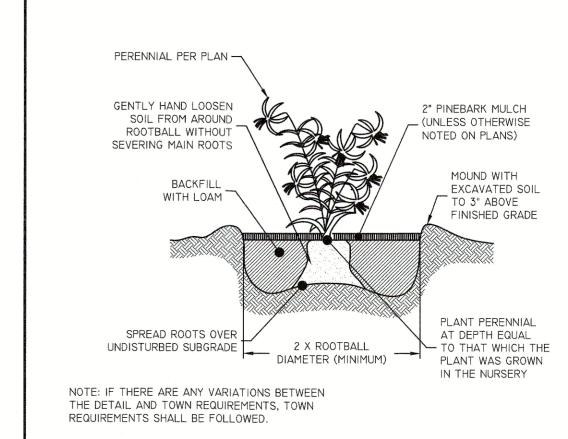
NOT TO SCALE



NOTE: IF THERE ARE ANY VARIATIONS BETWEEN THE DETAIL AND TOWN REQUIREMENTS, TOWN REQUIREMENTS SHALL BE FOLLOWED.

ORNAMENTAL GRASS PLANTING DETAIL

NOT TO SCALE



PERENNIAL PLANTING DETAIL

NEERING TITLE
TESSIONAL ENG
NEERING DOES
CONTRACTOR I
HODS, SAFETY

LANDSCAR

a

O

<u>w</u>

a

et

Ö

GHW PLOT 2

