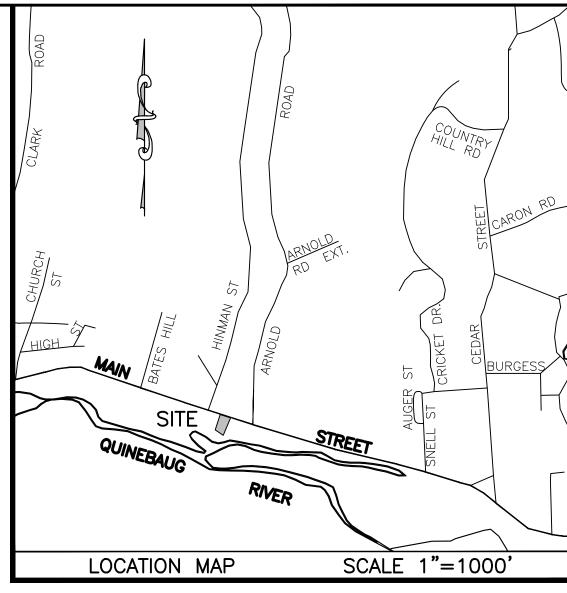
RIGHT OF WAY LINE ABUTTERS LINE EDGE OF PAVEMENT EXISTING CONTOUR RETAINING WALL TREE LINE NOW OR FORMERLY UTILITY POLE BOUNDARY POINT IRON MONUMENT WATER VALVE

\_\_\_\_\_\_ —— —— 555 —— —— —— \_\_\_\_\_ 

> CONCRETE WALK (TYP.) ROUTE - 20 STREET ( PUBLIC - WIDTH VARIES ) APPROXIMATE WATER MAIN 1.ROD \_\_\_\_\_w\_ (FOUND) GRANITE CURB (TYP.) CONCRETE WALK (TYP.) \_\_\_\_\_\_\_ \_\_\_\_\_\_ S 69'06'58" E -WOOD POST TF=590.14' LOADING DOCK 1.3' PAVEMENT ENCROACHMENT → MECO \ LIGHT POLE -505 MAIN STREET JENNY BOUNPHASAYSONH 489 MAIN STREET BOOK 47562 / PG. 345 NAVIAH 1738, LLC BOOK 56712 / PG. 200 BENCHMARK: CHISEL SQUARE YARD SETBACK EL=592.66' 501 MAIN STREET TOWN OF STURBRIDGE ₹584.59 **BOOK 62224 / PG. 137** TRANSFORMER 515 MAIN STREET JACQUELINE BELISLE BOOK 8149 / PG. 09 469A MAIN STREET TOWN OF STURBRIDGE BOOK 53491 / PG. 374



# MAP REFERENCES

1. STURBRIDGE-1925 LAYOUT, SCALE: 1"=40', SHEETS 6 & 7 OF 14

2. "EXISTING SITE PLAN FOR JENNY C. BOUNPHASAYSONH, THAI ORCHARD VILLAGE RESTAURANT, 505 MAIN STREET, STURBRIDGE, MA," SCALE: 1"=20', DATE: 1/20/16, DRAWING NUMBER 12023, SHEET 2 OF 7, REVISION 3, BY JALBERT ENGINEERING, INC.

1. THE TYPE OF SURVEY PERFORMED IS A BOUNDARY AND TOPOGRAPHIC SURVEY CONFORMING TO THE STANDARDS OF ACCURACY FOR A HORIZONTAL CLASS A-2 AND VERTICAL CLASS T-2 AND IS A RESURVEY OF THE SUBJECT PROPERTY.

THIS SURVEY WAS PREPARED TO DEPICT THE BOUNDARY AND EXISTING CONDITIONS OF THE SUBJECT PROPERTY.

2. OWNER OF RECORD: TOWN OF STURBRIDGE RECORDED IN VOLUME 62224, PAGE 137 ON 04/17/2020 OF THE WORCESTER SOUTH DISTRICT REGISTRY OF DEEDS AND IS SHOWN ON THE STURBRIDGE TAX ASSESSOR MAP No. 415 AS LOT 501 OF BLOCK 2432.

3. TOTAL AREA OF PROPERTY =  $0.47\pm$  ACRES (20,542± SQUARE FEET). 4. SITE IS LOCATED IN ZONE COMMERCIAL TOURIST DISTRICT. SETBACKS: FRONT=25', SIDE=10', REAR=10', LOT AREA=10,000 S.F.

5. SITE CONDITIONS DEPICTED ARE BASED ON AN ON THE GROUND SURVEY COMPLETED ON 8/5/2020.

6. ELEVATIONS ARE BASED ON VERTICAL DATUM NAVD88.

7. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES, FROM PAROL TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO CME ASSOCIATES, INC. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455.

101 East River Drive, 1st Floor East Hartford, CT 06108 860-885-1055 | www.chacompanies.com

Drawing Copyright © 2015

SITE DEVELOPMENT PLAN PREPARED FOR:

TOWN OF STURBRIDGE 501 MAIN STREET

STURBRIDGE, MA

IT IS A VOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IS ANY WAY. IF AN ITEM BEARING TH STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

No. Submittal / Revision App'd. By Date

**EXISTING CONDITIONS** 

Designed By: Drawn By: Checked B PMP ZBC/PMP Issue Date: | Project No: | Scale: 10/29/2020 065470

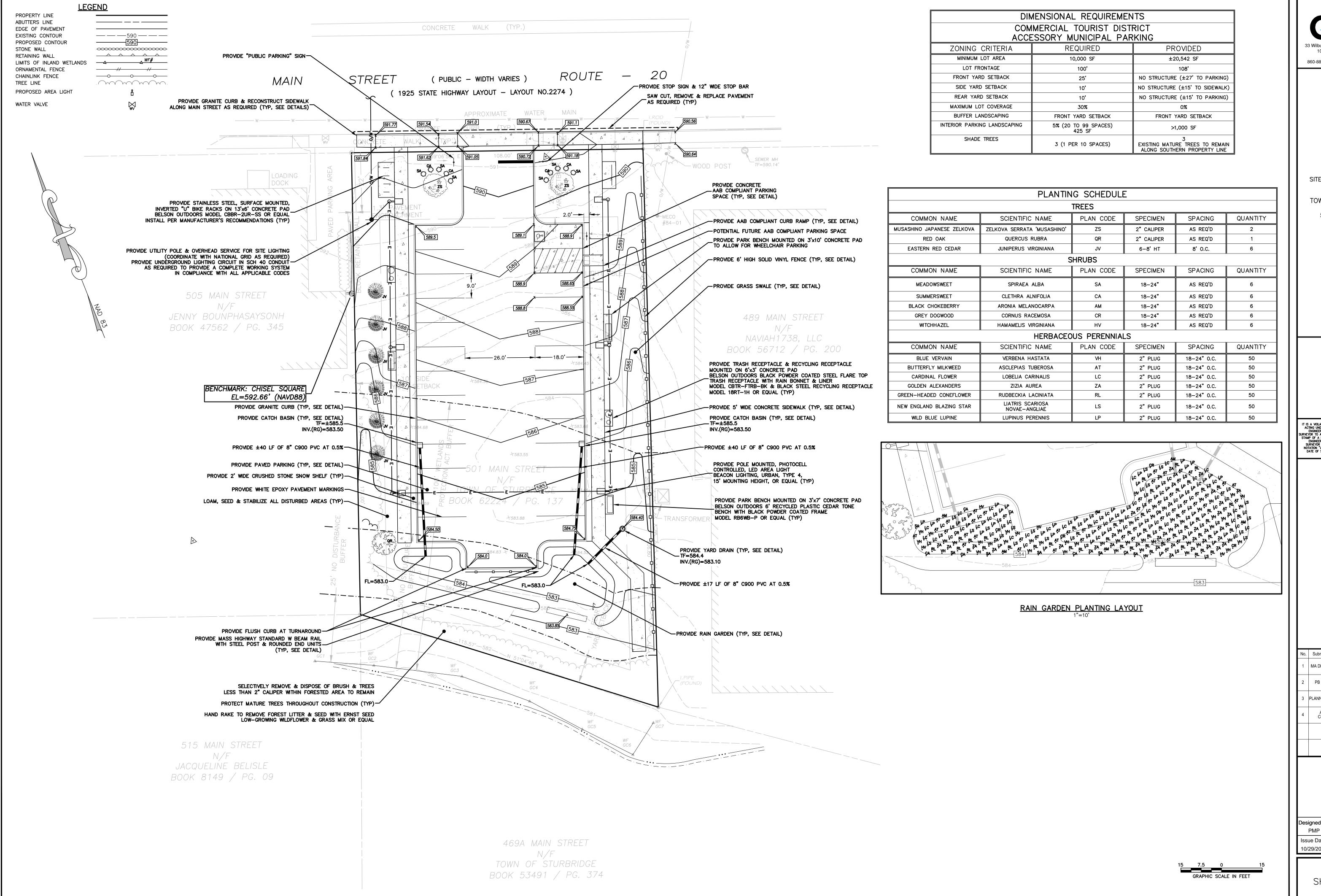
Drawing No.:

SHEET 1 OF 5

GRAPHIC SCALE IN FEET

I CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS, AND THE PROPERTY LINES SHOWN ARE THE LINES OF EXISTING OWNERSHIP, AND THE LINES OF STREETS AND WAYS ARE THOSE OF PUBLIC OR PRIVATE STREETS AND WAYS ALREADY ESTABLISHED, AND THAT NO LINES FOR DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN.

WILLIAM J. DORGAN PLS# 49622



33 Wilbur Cross Way, Mansfield, CT 06268 101 East River Drive, 1st Floor East Hartford, CT 06108 860-885-1055 | www.chacompanies.com

SITE DEVELOPMENT PLAN PREPARED FOR:

TOWN OF STURBRIDGE

501 MAIN STREET

STURBRIDGE, MA

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING TH STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "SLETERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

SITE PLAN

 Designed By:
 Drawn By:
 Checked B

 PMP
 ZBC/PMP

 Issue Date:
 Project No:
 Scale:

 10/29/2020
 065470
 1" = 15'

Drawing No.:

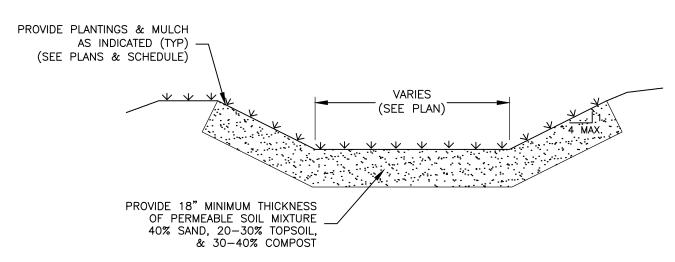
SHEET 2 OF 5

# PRECAST CONCRETE CATCH BASIN

1. FACE OF PIPE SHALL BE FLUSH OR NOT TO PROJECT MORE THAN 4" FROM FACE OF WALL ALONG CENTERLINE OF PIPE.

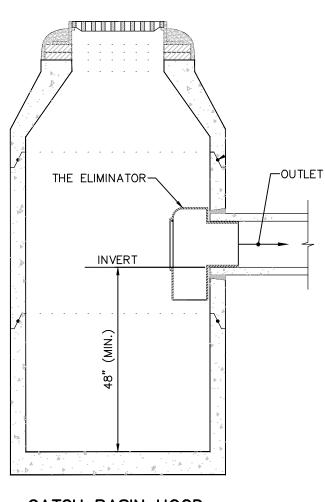
2. FOR DESCRIPTION, MATERIALS, AND CONSTRUCTION METHODS SEE MASSDOT "STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES" AND CONSTRUCTION STANDARDS AND THE CONTRACT DOCUMENT SPECIFICATIONS.

- 3. MINIMUM DEPTH OF SUMP TO BE 4'.
- 4. WHEN A CURB INLET IS INSTALLED, THE OPENING IS TO BE 24"  $\pm$ 1" X 27"  $\pm$ 1".
- 5. ALL CATCH BASINS SHALL INCLUDE A CATCH BASIN HOOD FOR THE OUTLET PIPE.
- 6. CATCH BASIN AND ALL APPURTENANCES SHALL MEET H-20 LOADING.



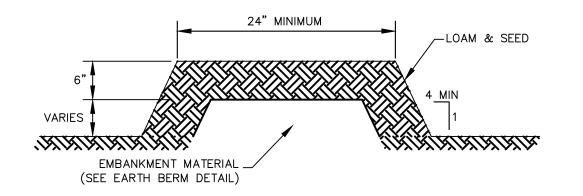
# NOTES:

- 1.) PERMEABLE SOIL MIXTURE SHALL NOT BE COMPACTED AND THE ENTIRE RAIN GARDEN SHALL BE PROTECTED FROM HEAVY EQUIPMENT TRAFFIC THROUGHOUT CONSTRUCTION.
- 2.) THE CONTRACTOR SHALL BE LIABLE FOR THE REPLACEMENT OF THE PERMEABLE SOIL MIXTURE IF E&S CONTROLS ARE NOT INSTALLED & MAINTAINED AS INDICATED.
- 3.) PLANT SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.
- 4.) CONTRACTOR MAY SUBSTITUTE LARGER OR SMALLER SPECIMENS, AT THE DISCRETION OF THE ENGINEER, IF INDICATED SIZE IS NOT READILY AVAILABLE. MODIFICATIONS TO PLANTING DENSITY MUST BE COORDINATED
- 5.) PROVIDE A TWO INCH THICK LAYER OF SHREDDED BARK MULCH FOR WEED CONTROL. DO NOT BURY THE CROWNS OF PLANTINGS.

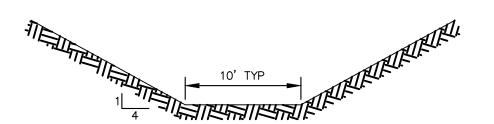


CATCH BASIN HOOD

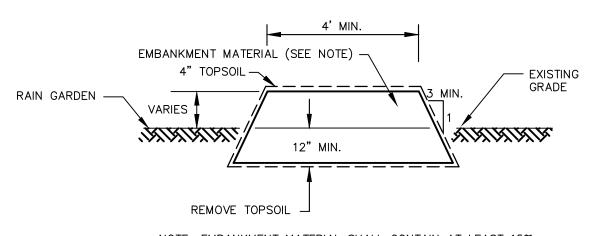
NOT TO SCALE



<u>SPILLWAY</u>

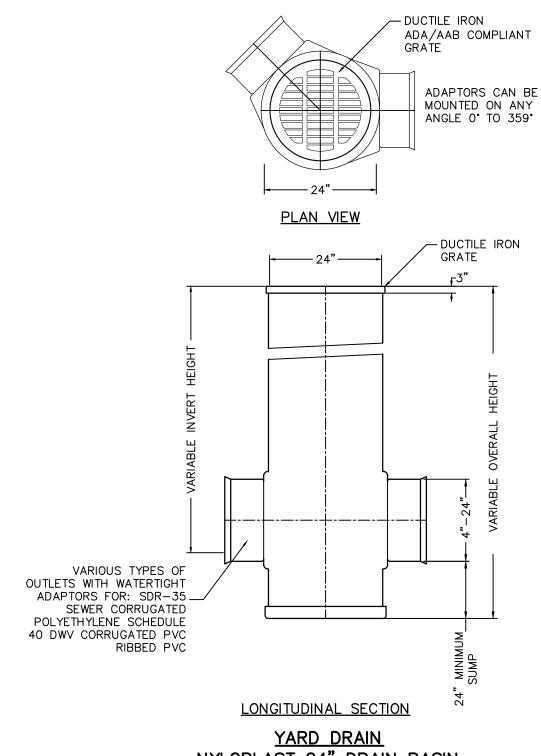


SPILLWAY CROSS SECTION NOT TO SCALE

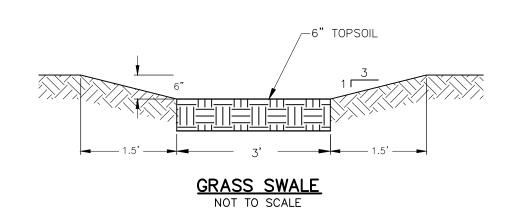


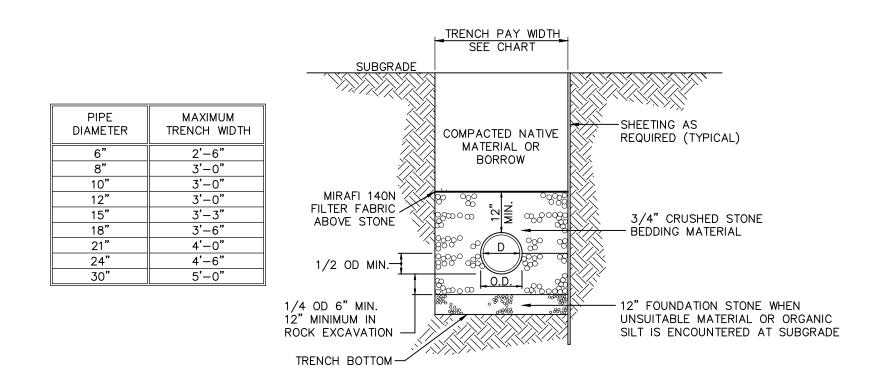
NOTE: EMBANKMENT MATERIAL SHALL CONTAIN AT LEAST 15% PASSING THE #200 SIEVE AND NOT MORE THAN 50% PASSING THE #200 SIEVE. NO STONES LARGER THAN 6 INCHES SHALL BE ALLOWED WITHIN THE COMPACTED EMBANKMENT. WITHIN TWO FEET OF ANY STRUCTURE, THE MAXIMUM SIZE SHALL BE 3 INCHES. CONSTRUCTION SHALL NOT TAKE PLACE DURING COLD PERIODS WHERE TEMPERATURES ARE CONSISTENTLY LOWER THAN 40 DEGREES FAHRENHEIT. EMBANKMENT MATERIAL TO BE COMPACTED IN LIFTS TO 95% MAXIMUM DRY

# EARTH BERM DETAIL



NYLOPLAST 24" DRAIN BASIN





TRENCH SECTION FOR STORM DRAINS

NOT TO SCALE

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> SITE DEVELOPMENT PLAN PREPARED FOR:

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STURBRIDGE, MA

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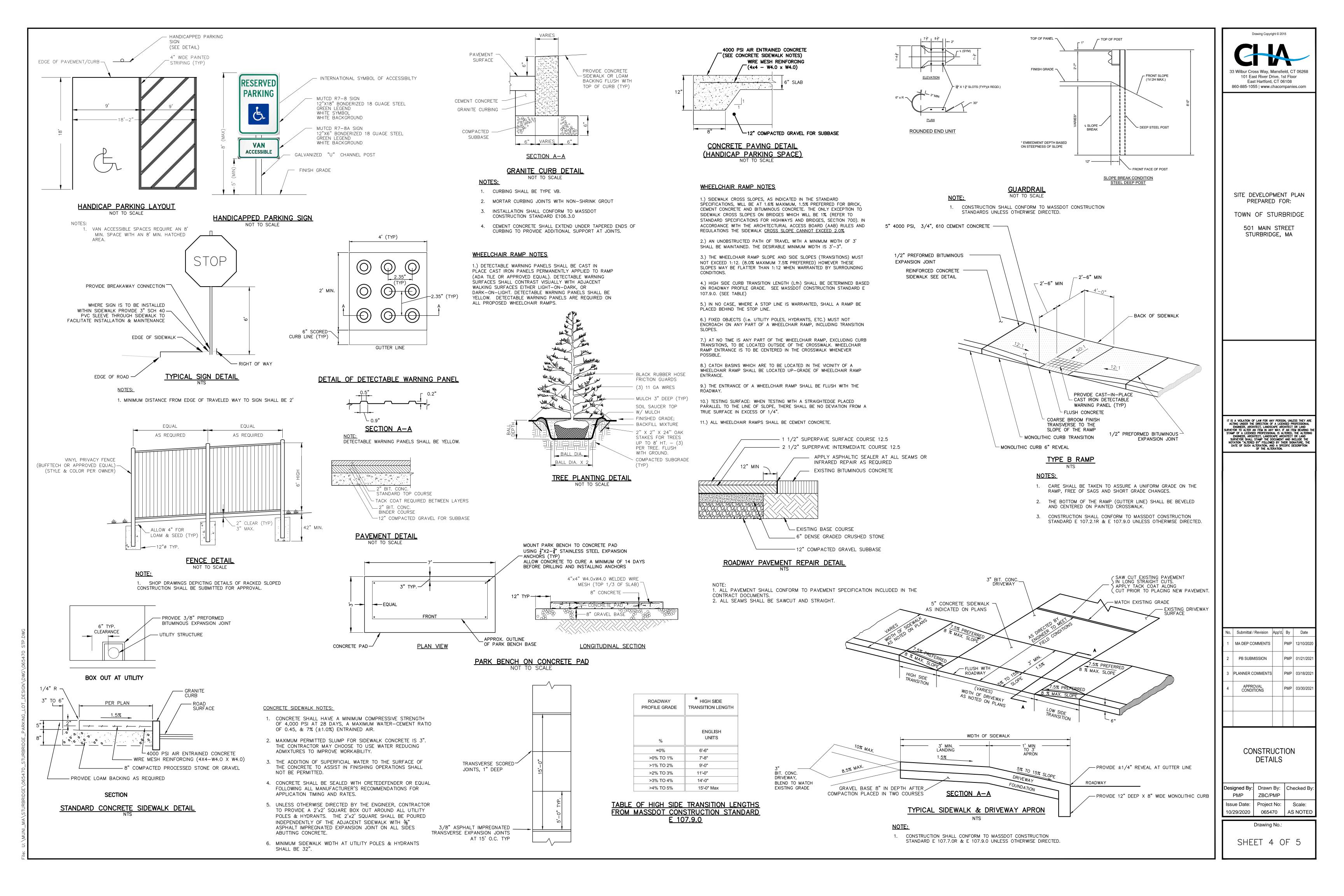
No. Submittal / Revision App'd. By Date MA DEP COMMENTS PB SUBMISSION PMP 01/21/202 PLANNER COMMENTS PMP 03/18/202 APPROVAL CONDITIONS PMP 03/30/20

> CONSTRUCTION DETAILS

Designed By: Drawn By: Checked B PMP ZBC/PMP Issue Date: | Project No: | Scale: 065470 AS NOTE 10/29/2020

Drawing No.:

SHEET 3 OF 5



# PROJECT NARRATIVE

THIS PROJECT CONSISTS OF THE CONSTRUCTION OF PUBLIC PARKING AND PEDESTRIAN ACCESS ON ±0.5 ACRES IN THE TOWN OF STURBRIDGE, MASSACHUSETTS. THE LOCATION OF THE SITE IS ON THE SOUTH SIDE OF MAIN STREET (ROUTE 20) APPROXIMATELY 500' WEST OF ARNOLD ROAD. THIS PROJECT WILL CONSIST OF PAVED PARKING, CONCRETE SIDEWALKS, AND LIGHTING.

IT IS ANTICIPATED THAT APPROXIMATELY 0.45 ACRES OF THE 0.5 ACRE SITE WILL BE DISTURBED DURING THE CONSTRUCTION OF THE FACILITY.

THE PROJECT SHALL BE DEVELOPED IN A SINGLE PHASE, HOWEVER, DISTURBED AREAS SHALL BE STABILIZED AT MILESTONE POINTS DURING CONSTRUCTION. ALL WORK SHALL BE SCHEDULED SUCH THAT STABILIZATION COINCIDES WITH THE ABILITY TO VEGETATE DISTURBED AREAS, APRIL 1 THROUGH JUNE 15 AND AUGUST 15 THROUGH OCTOBER 1.

THIS PROJECT REQUIRES THE FOLLOWING APPROVALS: CONSERVATION COMMISSION

# PLANNING BOARD

#### ESTIMATED CONSTRUCTION SCHEDULE

- A. INSTALL EROSION AND SEDIMENT CONTROL SYSTEMS APRIL, 2021
- B. ROUGH GRADE SITE APRIL, 2021
- C. CONSTRUCT PARKING MAY, 2021
- D. FINISH GRADE SITE AND INSTALL LANDSCAPING JUNE. 2021

#### GENERAL NOTES

- A. ELEVATIONS ARE BASED ON AN ASSUMED DATUM.
- B. ALL UTILITIES SHALL BE APPROVED BY LOCAL UTILITY COMPANIES PRIOR TO CONSTRUCTION; ALL UTILITIES SHALL BE CONSTRUCTED TO UTILITY COMPANY SPECIFICATIONS.
- C. ALL CONSTRUCTION SHALL BE TO TOWN SPECIFICATIONS & REGULATIONS.
- D. NO CHANGES CAN BE MADE TO THESE PLANS WITHOUT THE TOWN'S APPROVAL.
- E. CONTRACTOR SHALL OBTAIN ALL REQUIRED LOCAL & STATE PERMITS PRIOR TO BEGINNING ANY CONSTRUCTION.
- F. FIELD CHANGES SHALL HAVE PRIOR APPROVAL OF THE TOWN.

MASSACHUSETTS, D.O.T. STANDARD ROADWAY DRAWINGS.

- G. CATCH BASIN TOPS SHALL NOT BE CEMENTED DOWN UNTIL FINAL GRADES ARE SET.
- H. UNLESS OTHERWISE NOTED OR SPECIFIED, ALL ROADWAYS & STORM DRAINAGE SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE COMMONWEALTH OF MASSACHUSETTS, D.O.T. "STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.

1995". SIMILARLY PERTINENT CONSTRUCTION DETAILS THAT ARE NOT INCLUDED

CONTRACTOR SHALL NOTIFY THE TOWN OF CONSTRUCTION SCHEDULE SO THAT INSPECTION MAY BE PROVIDED.

WITH THESE DRAWINGS SHALL CONFORM TO THE COMMONWEALTH OF

- UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED ON PLANS HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES, FROM PAROL TESTIMONY, FIELD MEASUREMENTS AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO CHA THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION.
- K. CONTACT "DIG SAFE" AT 1-888-344-7233 TWO (2) WORKING DAYS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY.

# SEEDING SPECIFICATIONS

- A. IF GROUND HAS BEEN PREVIOUSLY MULCHED, MULCH MUST BE REMOVED OR ADDITIONAL NITROGEN MUST BE ADDED.
- REMOVE ALL SURFACE STONES 2" OR LARGER AS WELL AS ALL DEBRIS SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, CLUMPS, OR OTHER UNSUITABLE MATERIAL
- APPLY FERTILIZER AT 7.5 POUNDS PER 1,000 SQUARE FEET AND LIME AT 200 POUNDS PER 1,000 SQUARE FEET UNLESS SOIL TESTING FOR REQUIREMENTS IS
- NO MOWING IS TO BE UNDERTAKEN UNTIL THE MAJORITY OF THE VEGETATION IS AT LEAST 6" HIGH. MOWING SHOULD CUT THE TOP 1/3 OF VEGETATION. DO NOT UNDER ANY CIRCUMSTANCES CUT VEGETATION BELOW 3".
- DO NOT APPLY ANY FORM OF WEED CONTROL UNTIL GRASS HAS BEEN MOWED AT LEAST 4 TIMES.
- THESE SEEDING MEASURES ARE NOT TO BE USED ON SLOPES IN EXCESS OF 2:1
- PERMANENT SEEDING MEASURES ARE TO BE USED INSTEAD OF TEMPORARY SEEDING MEASURES WHERE WORK IS TO BE SUSPENDED FOR A PERIOD OF TIME LONGER THAN 1 YEAR.
- IF THERE IS NO EROSION, BUT SEED SURVIVAL IS LESS THAN 100 PLANTS PER SQUARE FOOT AFTER 4 WEEKS OF GROWTH, RE-SEED AS PLANTING SEASON ALLOWS.

# SILT FENCE SPECIFICATIONS

5. PUNCTURE STRENGTH

8. PERMITTIVITY

- SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER, ETHYLENE, OR SIMILAR FILAMENTS AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING MINIMUM REQUIREMENTS:
- 1. FILTERING EFFICIENCY 75 PERCENT (MIN) 2. GRAB TENSILE STRENGTH 100 POUNDS
- 3. ELONGATION AT FAILURE 15 PERCENT 4. MULLEN BURST STRENGTH 250 POUNDS PER SQUARE INCH
- 6. APPARENT OPENING SIZE 0.60mm< X <0.90mm
- FLOW RATE 0.2 GALLONS PER SQUARE FOOT PER MINUTE

50 POUNDS

0.05 PER SECOND (MIN)

- 9. ULTRAVIOLET RADIATION STABILITY 70 PERCENT AFTER 500 HOURS OF EXPOSURE (MIN) STAKES ARE TO BE MADE OUT OF HARDWOOD WITH A MINIMUM CROSS
- SECTIONAL AREA OF 1.5 SQUARE INCHES OR STEEL POSTS WITH A MINIMUM WEIGHT OF 0.5 POUNDS PER LINEAR FOOT.
- ON SLOPES WHERE SURFACE FLOW FOLLOWS THE SILT FENCE LINE, PERPENDICULAR SILT FENCE CHECKS SHALL BE INSTALLED AT 50 FOOT

TORN OR PUNCTURED GEOTEXTILES SHALL NOT BE USED.

LINES OF SILT FENCE SHOULD FOLLOW CONTOUR LINES 5-10 FEET DOWN GRADIENT FROM THE SLOPE. WHERE CONTOUR LINES CAN NOT BE FOLLOWED PERPENDICULAR WINGS SHOULD BE PLACED AT 50 FOOT INTERVALS.

#### CONSTRUCTION SEQUENCE

- A. STAKEOUT LIMIT OF DISTURBANCE.
- B. HOLD A PRECONSTRUCTION MEETING.
- C. CONTACT "DIG SAFE" AT 1-888-344-7233 TWO (2) WORKING DAYS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY
- INSTALL THE CONSTRUCTION ENTRANCE.
- E. INSTALL PERIMETER FILTER (SILT FENCE).
- PERFORM ALL NECESSARY CLEARING AND GRUBBING OPERATIONS.
- G. EXCAVATE & DISPOSE OF ALL STUMPS OFF SITE.
- STRIP ALL TOPSOIL WITHIN THE FOOTPRINT OF THE CONSTRUCTION SITE. STOCKPILE OFF-SITE.
- ROUGH GRADE SITE. REMOVE & DISPOSE OF UNSUITABLE SOILS & REPLACE WITH GRAVEL BORROW AS REQUIRED.
- PRIOR TO INSTALLATION OF SURFACE WATER CONTROLS SUCH AS TEMPORARY DIVERSIONS AND STONE DIKES, INSPECT EXISTING CONDITIONS TO ENSURE DISCHARGE LOCATIONS ARE STABLE. IF NOT STABLE. REVIEW DISCHARGE CONDITIONS WITH THE DESIGN ENGINEER AND IMPLEMENT ADDITIONAL STABILIZATION MEASURES PRIOR TO INSTALLING WATER SURFACE CONTROLS.
- K. STABILIZE CUT AND FILL SLOPES.
- L. PLACE BINDER COURSE PAVEMENT.
- M. INSTALL GRANITE CURBING.
- N. CONSTRUCT CONCRETE SIDEWALKS.
- O. CONSTRUCT STORMWATER BASIN
- P. PLACE TOPSOIL WHERE REQUIRED. INSTALL PERIMETER LANDSCAPE PLANTINGS.
- Q. FINISH GRADE SIDE SLOPES, SEED AND MULCH.
- R. PLACE TOP COURSE PAVEMENT.

STRUCTURES OR BASINS.

- S. COMPLETE THE BALANCE OF SITE WORK AND STABILIZATION OF ALL OTHER DISTURBED AREAS.
- T. REMOVE TREE PROTECTION MEASURES.
- U. ALL REMAINING EXPOSED AREAS SHALL BE LOAMED, SEEDED AND MULCHED OR
- V. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS.

SODDED WITHIN 14 DAYS OF FINAL GRADING.

W. CONTRACTOR TO REMOVE ANY ACCUMULATED SEDIMENT FROM DRAINAGE

NOTE: SEVERAL OF THE ABOVE ACTIVITIES MAY BE DONE SIMULTANEOUSLY.

# EROSION & SEDIMENT CONTROL OPERATIONS & MAINTENANCE

- A. EROSION AND SEDIMENTATION CONTROL AND RESTORATION MEASURES SHALL CONFORM TO THE "1997 MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS". PUBLISHED BY THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF RESOURCE PROTECTION: AND TO TOWN REGULATIONS.
- INSTALLATION OF SEDIMENT AND EROSION CONTROLS SUCH AS WATTLES AND SILT FENCES SHALL BE ESTABLISHED PRIOR TO COMMENCING ANY LAND DISTURBANCE ACTIVITIES.
- ALL STOCKPILED MATERIAL SHALL BE RINGED WITH WATTLES OR SILT FENCES. ANY MATERIAL TO BE STOCKPILED LONGER THAN 14 DAYS SHALL BE STABILIZED WITH TEMPORARY SEEDING OR JUTE NETTING.
- PAVEMENT AND CURBING SHOULD BE INSTALLED AS SOON AS POSSIBLE AFTER STORM DRAINAGE IS INSTALLED.
- CATCH BASINS SHALL BE PROTECTED FROM SEDIMENTATION UNTIL ALL AREAS ARE PERMANENTLY VEGETATED OR STABILIZED.
- CATCH BASIN SUMPS SHALL BE CLEANED OF SILT PERIODICALLY DURING
- WATTLES OR SILT FENCE SHALL BE PLACED 5-10 FEET FROM THE TOE OF ALL CRITICAL SLOPES AS SHOWN ON THE PLAN. THESE SHALL BE CHECKED BY THE CONTRACTOR REGULARLY AND REPAIRED WHENEVER THEY FAIL TO ENSURE CLEAN RUN-OFF FROM THE SITE.
- H. ADDITIONAL CONTROL MEASURES IF REQUESTED BY THE CITY SHALL BE INSTALLED IMMEDIATELY UPON REQUEST.
- ALL DISTURBED AREAS SHALL BE PROTECTED WITH A MINIMUM VEGETATION COVER AS SHOWN IN ACCOMPANYING CHART.
- J. THE CONTRACTOR SHALL PLAN ALL LAND DISTURBING ACTIVITIES IN A MANNER AS TO MINIMIZE THE EXTENT OF THE DISTURBED AREAS.
- THE CONTRACTOR SHALL MAKE DAILY INSPECTIONS OF THE SITE TO INSURE EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES AND WILL IMMEDIATELY MAKE NECESSARY REPAIRS IF REQUIRED BY THE CITY.
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED AT A MINIMUM OF ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.1 INCHES OR GREATER TO DETERMINE MAINTENANCE NEEDS.
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE REPLACED WITHIN 24 HOURS OF AN OBSERVED FAILURE.
- ALL CONSTRUCTION TRAFFIC SHALL ENTER AND LEAVE BY THE DESIGNATED ENTRANCE. THIS ENTRANCE SHALL BE CONSTRUCTED OF CRUSHED STONE TO HELP FREE TIRES OF SOIL WHEN LEAVING THE SITE. THE CONTRACTOR SHALI INSTRUCT ALL VEHICLE DRIVERS TO CLEAN SOIL MATERIAL FROM TIRES IN FRONT OF THE SITE. ALL SOIL, MISCELLANEOUS DEBRIS, OR OTHER MATERIAL SPILLED, DUMPED OR OTHERWISE DEPOSITED ON PUBLIC STREETS, HIGHWAYS, SIDEWALKS OR OTHER PUBLIC THOROUGHFARES DURING TRANSIT TO OR FROM THE SITE SHALL BE REMOVED PROMPTLY.
- O. THE CONTRACTOR HEREBY ACKNOWLEDGES HIS RESPONSIBILITY TO INSTALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ON THIS SITE AND THAT HIS FAILURE TO INSTALL AND MAINTAIN THESE DEVICES COULD RESULT IN FINES OR SUSPENSION OF WORK BY THE CITY.
- P. MINIMIZE OR ELIMINATE ANY UNNECESSARY LAND DISTURBANCE OR CLEARING.

RED FESCUES

REDTOP

SEEDING MIXTURES BY WEIGHT

PERENNIAL RYEGRASS

ANNUAL RYEGRASS OR

PERENNIAL RYEGRASS

KENTUCKY BLUEGRASS 45%

KENTUCKY TALL FESCUE 47%

CREEPING RED FESCUE 47%

WHERE TREES ARE TO BE RETAINED, THE SEED MIXTURE SHOULD BE ADAPTED FOR SHADY CONDITIONS.

RATE PER

1,000 SQ. FT.

1 LBS.

0.95 LBS.

1-1/2 LBS.

AREAS WHERE SEED

ALL LAWN AREAS

ROAD CUTS, FILLS,

DIVERSION DITCHES, &

STORMWATER BASINS

TEMPORARY SEEDING

MIX APPLIES

# STORMWATER OPERATION AND MAINTENANCE

STORMWATER FACILITY

OPERATION AND MAINTENANCE PLAN:

OWNER: TOWN OF STURBRIDGE, 308 MAIN STREET, STURBRIDGE, MASSACHUSETTS,

**RESPONSIBILITY:** 

#### OWNER OR ITS ASSIGNS SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE OPERATION AND MAINTENANCE PLAN FOR THE MUNICIPAL PARKING LOT AT 501 MAIN STREET AND FOR ANY CORRECTIVE ACTION REQUIRED.

#### CONSTRUCTION PHASE

#### **GENERAL PROVISIONS:**

- CONTRACTOR TO INSTALL AND MAINTAIN DRAINAGE FACILITIES AS SHOWN ON THE PLAN SET TITLED: "SITE DEVELOPMENT PLAN, PREPARED FOR, TOWN OF STURBRIDGE, 501 MAIN STREET, STURBRIDGE, MASSACHUSETTS", DATED SEPTEMBER 29, 2020, PREPARED BY CHA.
- 2. PRIOR TO CONSTRUCTION, ALL EROSION/SILTATION CONTROL DEVICES SHOWN ON ABOVE PLAN SHALL BE INSTALLED. TO PREVENT SILT INTRUSION INTO THE DRAINAGE SYSTEM DURING CONSTRUCTION, THE CONTRACTOR IS TO INSTALL INLET PROTECTION AT ALL CATCH BASINS AND SET SILT FENCE AT ALL SLOPES WHICH MAY ERODE IN THE DIRECTION OF ANY OPEN DRAINAGE FACILITIES. SUCH PREVENTIVE MEASURES ARE TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS.
- 3. EROSION CONTROLS ARE TO BE INSPECTED ON A DAILY BASIS. UPON DISCOVERY, THE CONTRACTOR SHALL REMOVE ANY SEDIMENT FROM AN EROSION CONTROL STRUCTURE.
- 4. ALL EXPOSED SOILS SHALL BE IMMEDIATELY STABILIZED TO PREVENT EROSION.
- 5. UPON INSTALLATION OF CATCH BASINS, INLET PROTECTION SHALL BE INSTALLED AND MAINTAINED UNTIL READY FOR PAVING.
- 6. PRIOR TO CONSTRUCTION OF IMPERVIOUS AREAS, ALL DRAINAGE STRUCTURES AND PIPES SHALL BE INSTALLED AND INSPECTED FOR PROPER FUNCTION. DURING CONSTRUCTION OF OTHER SITE FEATURES, DRAINAGE FACILITIES SHALL BE INSPECTED ON A DAILY BASIS AND CLEANED/REPAIRED IMMEDIATELY UPON DISCOVERY OF SEDIMENT BUILD-UP OR DAMAGE.
- 7. AFTER PAVING IS INSTALLED, IT SHALL BE SWEPT CLEAN ON A MONTHLY BASIS.

#### RAIN GARDEN:

- CONTRACTOR TO INSPECT WEEKLY OR AFTER EACH 0.5 INCH RAIN EVENT.
- 2. CONTRACTOR RESPONSIBLE FOR ALL ASSOCIATED MOWING DURING CONSTRUCTION. (MOWING SHOULD BE PERFORMED WHEN GROUND IS DRY TO AVOID RUTS AND COMPACTION)
- 3. CONTRACTOR SHALL CLEAN AND INSPECT RAIN GARDEN AFTER SITE IS COMPLETELY STABILIZED. ANY ACCUMULATED DEBRIS OR SEDIMENT SHALL BE REMOVED PRIOR TO TRANSFER TO OWNER.

# POST-DEVELOPMENT PHASE

#### SNOW STOCKPILING:

SNOW ACCUMULATIONS REMOVED FROM STREETS AND PARKING LOTS SHALL BE PLACED IN UPLAND AREAS, WHERE SAND AND DEBRIS WILL REMAIN AFTER SNOW MELT FOR LATER REMOVAL. CARE SHOULD BE TAKEN NOT TO DEPOSIT SNOW IN THE IMMEDIATE VICINITY OF CATCH BASINS, DRAINAGE SWALES, OR SLOPES LEADING TO BODIES OF WATER, AND DRINKING WATER WELL SUPPLIES.

# PAVEMENT SWEEPING:

STREETS AND PARKING LOTS SHOULD BE SWEPT CLEAN AT LEAST TWICE ANNUALLY, PREFERABLY IMMEDIATELY AFTER WINTER SNOW MELT AND BEFORE SPRING RAINS. SWEEPING DURING THIS PERIOD CAPTURES PEAK SEDIMENT LOADS AND EXTENDS THE SERVICE LIFE OF THE STORM WATER MANAGEMENT SYSTEM. RAIN GARDEN:

RAIN GARDENS SHALL BE INSPECTED AT LEAST ANNUALLY TO ENSURE THAT THE POND IS OPERATING AS INTENDED. THE OUTLET STRUCTURE SHOULD BE INSPECTED FOR EVIDENCE OF CLOGGING OR OUTFLOW RELEASE VELOCITIES GREATER THAN DESIGN FLOW. POTENTIAL PROBLEMS THAT SHOULD BE CHECKED INCLUDE:

> § CRACKING OR TREE GROWTH ON THE EMBANKMENT § DAMAGE TO THE EMERGENCY SPILLWAY

§ SEDIMENT ACCUMULATION AROUND OUTLET ANY NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY. TRASH SHALL BE REMOVED AND THE BANKS MOWED AT LEAST TWICE PER YEAR. (MOWING SHOULD BE PERFORMED WHEN GROUND IS DRY TO AVOID RUTS AND COMPACTION) THE SEDIMENT FOREBAY SHALL BE CHECKED AND ACCUMULATED SEDIMENT REMOVED AT LEAST ANNUALLY. SEDIMENT SHALL BE REMOVED FROM THE POND AS NECESSARY, AND AT LEAST ONCE EVERY TEN YEARS.

# RECORD KEEPING & ANNUAL REPORTING:

LOCATION

WITHIN 7 DAYS AFTER

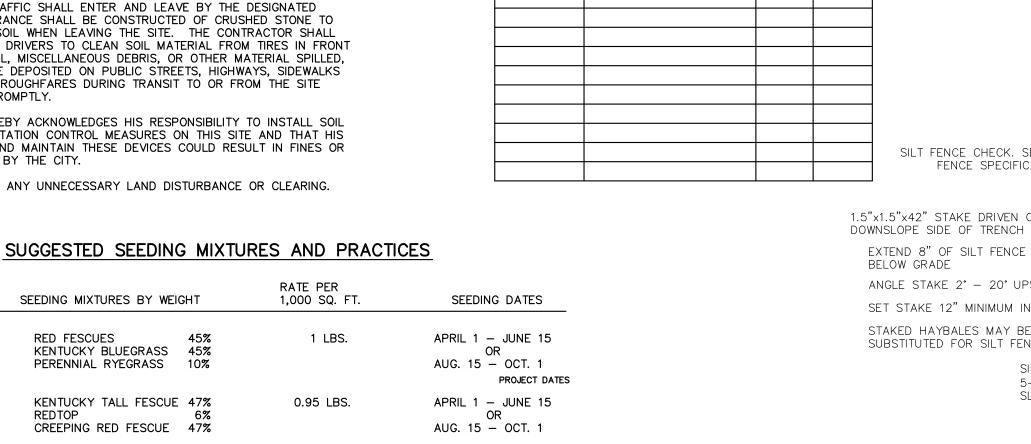
SUSPENSION OF

GRADING WORK

RECORDS SHALL BE MAINTAINED BY THE TOWN OF STURBRIDGE AT THEIR OFFICES AND SHALL DOCUMENT ALL ROUTINE AND EMERGENCY MAINTENANCE WORK PERFORMED TO THE STORMWATER MANAGEMENT SYSTEM AND SHALL BEAR THE SIGNATURE OF THE INDIVIDUAL SUPERVISING THE WORK.

DATE INITIALS

# MAINTENANCE LOG



DESCRIPTION

# PLAN VIEW <u>INLET SEDIMENT CONTROL DEVICE</u> SILT FENCE CHECK. SEE SILT -FENCE SPECIFICATIONS. 1.5"x1.5"x42" STAKE DRIVEN ON -ANGLE STAKE 2° - 20° UPSLOPE SET STAKE 12" MINIMUM INTO GRADE SUBSTITUTED FOR SILT FENCE

-2 EACH DUMP STRAPS

- EXPANSION

**BAG DETAIL** 

-DUMP STRAP

RESTRAINT (1/4"

NYLON ROPE 2'

FLAT WASHERS)

BENCHMARK: CHISEL SQUARE

GRAPHIC SCALE IN FEET

INSTALLATION DETAIL

SILTSACK-

SILT FENCE LOCATED -

5-10' FROM TOE OF

SUBGRADE

SILT FENCE AT TOE OF SLOPE APPLICATION

NOT TO SCALE

BACKFILLED TRENCH -

SLOPE

1" REBAR FOR

BAG REMOVAL

FROM INLET

EXTEND 8" OF SILT FENCE

STAKED HAYBALES MAY BE

BELOW GRADE

EL=592.66' (NAVD88)

FABRIC 2" STONE CONSTRUCTION ENTRANCE PAD

PLACEMENT AND CONSTRUCTION OF A SILT FENCE

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PROVIDE & MAINTAIN CONSTRUCTION ENTRANCE

PROVIDE & MAINTAIN A CONTINUOUS LINE OF SILT FENCE

. ATTACH FILTER FABRIC

5. BACKFILL THE TRENCH

AND COMPACT THE

EXCAVATED SOIL.

TO THE POSTS AND

TRENCH.

EXTEND IT 8" INTO THE

THROUGHOUT CONSTRUCTION (TYP, SEE DETAILS)

FABRIC

COMPACTED

POINT "A" SHOULD BE HIGHER

THAN POINT "B"

BACKFILL -

1. SET POST AND

DOWN SLOPE

BOTTOM OF

DRAINAGEWAY

EXCAVATE A 6" X 6'

TRENCH, SET POST

UPSWEEP FOR POSTS

STABILITY AND

SELF CLEANING

3. POSITION POSTS TO OVERLAP AS SHOWN, POSTS -

MAKING CERTAIN THAT FABRIC FOLDS

AROUND EACH POST ONE FULL TURN.

OF BUILT-UP SEDIMENT AT JOINT.

4. DRIVE POSTS TIGHTLY TOGETHER AND

SECURE TOPS OF POSTS BY TYING OF WITH

CORD OR WIRE TO PREVENT FLOW-THROUGH

THROUGHOUT CONSTRUCTION (TYP, SEE DETAILS)

SITE DEVELOPMENT PLAN PREPARED FOR:

TOWN OF STURBRIDGE

501 MAIN STREET

STURBRIDGE, MA

IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY AF IT IS A WOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE
ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL
ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND
SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING T
STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING
ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND
SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE
NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE
DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION
OF THE ALTERATION.

. | Submittal / Revision | App'd. | By | MA DEP COMMENTS PMP | 12/10/20 PB SUBMISSION PMP 01/21/20 PLANNER COMMENTS PMP 03/18/20: CONDITIONS PMP | 03/30/20

**EROSION & SEDIMENT** CONTROL PLAN

Designed By: Drawn By: Checked B ZBC/PMP Issue Date: | Project No: | 10/29/2020 065470 AS NOTE

SHEET 5 OF

Drawing No.