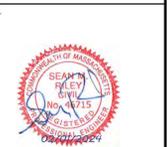


PREPARED BY:
COASTAL ENGINEERING COMPANY, INC.

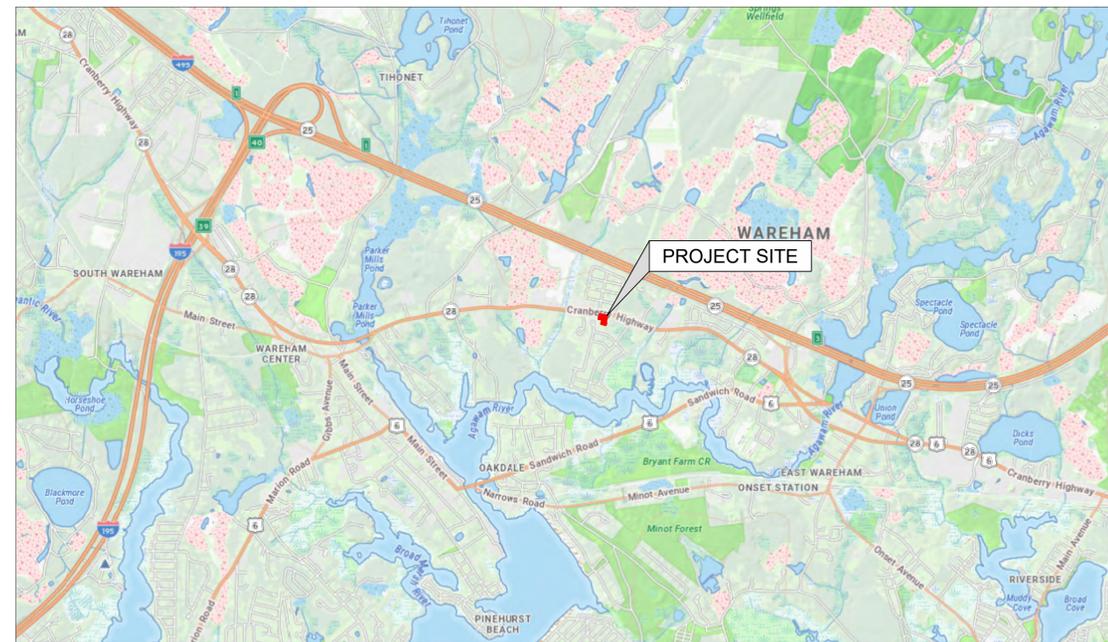
(A TIGHE AND BOND COMPANY)

PROJECT NAME:
GRACE LIGHTHOUSE CHURCH

PROJECT ADDRESS:
**2703 CRANBERRY HIGHWAY
 WAREHAM, MA 02571**



REV	DATE	DESCRIPTION	DWN	CHK



SITE VICINITY MAP
SCALE: NTS



SITE LOCATION MAP
SCALE: NTS

GRACE LIGHTHOUSE CHURCH
 2703 CRANBERRY HIGHWAY
 WAREHAM, MA 02571

SHEET INDEX			
SHEET #	SHEET TITLE	SHEET DESCRIPTION	DATE
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03	V-101	EXISTING CONDITIONS PLAN	2023-12-29
04	CE101	EROSION & SEDIMENTATION CONTROL PLAN	2024-01-30
05	CM101	LAYOUT AND MATERIALS PLAN	2024-01-30
06	CG101	GRADING AND DRAINAGE PLAN	2024-01-30
07	CJ101	SEWAGE DISPOSAL SYSTEM & UTILITIES PLAN	2024-01-30
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15	S-001	GENERAL NOTES	2023-07-15
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17	S-003	FIRST FLOOR FRAMING PLAN	2023-07-15
18	S-004	ROOF FRAMING PLAN	2023-07-15
19	L1.0	LANDSCAPE PLAN	2024-01-30
20	L2.0	PLANTING DETAILS	2024-01-30
21	LO-159397	PHOTOMETRIC LIGHTING PLAN	2024-01-02

LIST OF CONSULTANTS:

**LAND SURVEYOR
 CIVIL ENGINEER
 STRUCTURAL ENGINEER**
 COASTAL ENGINEERING COMPANY
 A TIGHE AND BOND COMPANY
 260 CRANBERRY HIGHWAY
 ORLEANS, MA 02653

BUILDING ARCHITECT:
 CATALYST ARCHITECT INTERIORS
 203 WILLOW ST, SUITE A
 YARMOUTHPORT, MA 02675

LANDSCAPE ARCHITECT:
 JENICK STUDIO
 88 ROUTE 6A, UNIT 2B
 SANDWICH, MA 02563

THIS DRAWING IS PREPARED FOR PERMITTING PURPOSES ONLY AND SHALL NOT BE USED FOR CONSTRUCTION. CONTRACTOR SHALL OBTAIN FINAL CONSTRUCTION DETAILS FROM THE ENGINEER PRIOR TO PREPARATION OF CONSTRUCTION BID AND BEFORE BEGINNING ANY WORK.

PROJECT/CLIENT NAME: GRACE LIGHTHOUSE CHURCH
 ADDRESS: 2703 CRANBERRY HIGHWAY WAREHAM, MA 02571
 DATE: 2024-01-30
 DRAWN BY: MDC CHECKED BY: DAV
 PROJECT NUMBER: C19495.00
 PROJECT STATUS: SITE PLAN REVIEW SET
 SHEET DESCRIPTION: TITLE SHEET
 SHEET TITLE: G-001
 SHEET NUMBER: SHEET 01 OF 09

ABBREVIATIONS

ABDN(D)	ABANDON(ED)	LOW	LIMIT OF WORK
ABUT	ABUTMENT	LF	LINEAR FEET
ACC	ACCESSIBLE	LP	LOW POINT
ADDL	ADDITIONAL	LS	LUMP SUM
ADJ	ADJACENT	MH	MANHOLE
APPROX	APPROXIMATE	MAX	MAXIMUM
ASPH	ASPHALT	MJ	MECHANICAL JOINT
BFP	BACK FLOW PREVENTER	MIN	MINIMUM
BL	BASELINE	MISC	MISCELLANEOUS
BSMT	BASEMENT	MON	MONUMENT
BE	BASEMENT ELEVATION	N	NORTH
BM	BENCHMARK	N/A	NOT APPLICABLE
BIT	BITUMINOUS	NIC	NOT IN CONTRACT
BOT	BOTTOM	NTS	NOT TO SCALE
BC	BOTTOM OF CURB	NF	NOW OR FORMERLY
BS	BOTTOM OF STEP	OFF	OFFSET
BW	BOTTOM OF WALL	OC	ON CENTER
BND	BOUND	OCS	OUTLET CONTROL STRUCTURE
BLDG	BUILDING	OH	OVERHEAD
CATV	CABLE TELEVISION	OHW	OVERHEAD WIRE
CIP	CAST IN PLACE	PRKG	PARKING
CI	CAST IRON	PK LOT	PARKING LOT
CB	CATCH BASIN	PVMT	PAVEMENT
CEM	CEMENT	PERF	PERFORATED
C-C	CENTER TO CENTER	PCPP	PERFORATED CORRUGATED POLYETHYLENE PIPE
CL	CENTERLINE	PERIM	PERIMETER
CLF	CHAIN LINK FENCE	PB	PLANT BED
CO	CLEANOUT	POCC	POINT OF COMPOUND CURVATURE
CLR	CLEAR	PC	POINT OF CURVATURE
COL	COLUMN	PRC	POINT OF REVERSE CURVATURE
CONC	CONCRETE	PT	POINT OF TANGENCY
CP	CONCRETE PIPE	POVC	POINT OF VERTICAL CURVATURE
CSP	CONCRETE SEWER PIPE	PVI	POINT OF VERTICAL INTERSECTION
COND	CONDUIT	PVT	POINT OF VERTICAL TANGENCY
CJ	CONSTRUCTION JOINT	PVC	POLYVINYL CHLORIDE
CMP	CORRUGATED METAL PIPE	LBS	POUNDS
CPP	CORRUGATED PLASTIC PIPE	PCF	POUNDS PER CUBIC FOOT
CY	CUBIC YARD	PSF	POUNDS PER SQUARE FOOT
CG	CURB & GUTTER	PSI	POUNDS PER SQUARE INCH
D	DEPTH	PCC	PRECAST CONCRETE CURB
DIA	DIAMETER	PL	PROPERTY LINE
DR	DRAIN	PROP	PROPOSED
DMH	DRAIN MANHOLE	R	RADIUS
DA	DRAINAGE AREA	RCP	REINFORCED CONCRETE PIPE
DH	DRILL HOLE	REM	REMOVE
DIP	DUCTILE IRON PIPE	R&D	REMOVE AND DISPOSE
EF	EACH FACE	R&R	REMOVE AND RESET
EW	EACH WAY	R&S	REMOVE AND STACK
ESMT	EASEMENT	RET	RETAINING
E	EAST	REV	REVISION
EC	EDGE OF CURB	ROW	RIGHT OF WAY
EOP	EDGE OF PAVEMENT	RD	ROOF DRAIN
ELEC	ELECTRIC	SAN	SANITARY
EMH	ELECTRIC MANHOLE	SCH	SCHEDULE
EL/ELEV	ELEVATION	SEP TNK	SEPTIC TANK
ENTR	ENTRANCE	SWR	SEWER
EX/EXIST	EXISTING	SMH	SEWER MANHOLE
EG	EXISTING GRADE	S	SOUTH
FF	FINISH FLOOR	SYP	SOUTHERN YELLOW PINE
FH	FIRE HYDRANT	SF	SQUARE FOOT
FES	FLARED END SECTION	SY	SQUARE YARDS
FLR	FLOOR	SS	STAINLESS STEEL
FC	FLUSH CURB	STA	STATION
FM	FORCE MAIN	STL	STEEL
FDN	FOUNDATION	STRM	STORM
GALV	GALVANIZED	SD	STORM DRAIN
G	GAS	SDMH	STORM DRAIN MANHOLE
GG	GAS GATE	TL	TANGENT LENGTH
GMH	GAS MANHOLE	TEL	TEL-DATA
GRAN	GRANITE	TMH	TELEPHONE MANHOLE
GRAV	GRAVEL	TEMP	TEMPORARY
GRL	GUARDRAIL	TP	TEST PIT
HH	HANDHOLE	TC	TOP OF CURB (GRADING)
HC	HANDICAP	TS	TOP OF STEP
HDPE	HIGH DENSITY POLYETHYLENE	TW	TOP OF WALL
HP	HIGH POINT	XFMR	TRANSFORMER
HMA	HOT MIX ASPHALT	TC	TRANSITION CURB (LAYOUT)
HYD	HYDRANT	TYP	TYPICAL
IN	INCHES	UG	UNDERGROUND
INV	INVERT	UNO	UNLESS NOTED OTHERWISE
IP	IRON PIPE	UNPVD	UNPAVED ROAD
K	K-VALUE	UTIL	UTILITY
LA	LANDSCAPED AREA	UP	UTILITY POLE
LT	LEFT	VAR	VARIES
L	LENGTH	WG	WATER GATE
LVC	LENGTH OF VERTICAL CURVE	WV	WATER VALVE
LTP	LIGHT POLE	W	WEST

LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED
		OHC	OVERHEAD CABLE LINE
		OHE	OVERHEAD ELECTRIC LINE
		OHT	OVERHEAD TELEPHONE LINE
		OHW	OVERHEAD WIRE
		P	POST
		PB	POST RAIL FENCE
		PB	PULL BOX
		PR	RAILROAD TRACKS
		IR	ROD IRON RAIL
		S	SEPTIC MANHOLE
		V	SEPTIC VENT
		SFM	SEWER FORCE MAIN
		S	SEWER MAIN
		S	SIGN
		D	SILT BARRIER
		E	SPOT ELEVATION
		E	STONE
		E	STONE WALL
		EM	SURVEY CONTROL POINT
		ES	TELEPHONE BOX
		ET/C	TELEPHONE LINE
		FP	TELEPHONE MANHOLE
		FL	TEST PIT
		FM	TOP OF BANK
		GM	TREELINE
		G	UNDERGROUND CABLE LINE
		G	UNDERGROUND ELECTRICAL SERVICE
		H	UNDERGROUND GAS SERVICE
		I	UNDERGROUND LINE
		L.A.	UNDERGROUND TELECOM SERVICE
		L.P.	UTILITY POLE
		L.O.W.	WATER MAIN
		M	WATER SERVICE
		215	WATER SURFACE
		216	WATER VALVE
		M	WELL
		M	WOOD FENCE
			WOOD POST

GENERAL NOTES

- THE SITE IS LOCATED IN WAREHAM, MASSACHUSETTS.
- STANDARD SPECIFICATIONS, WHEN REFERENCED IN THESE DRAWINGS, SHALL MEAN THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT ED). PARTS OF THE STANDARD SPECIFICATIONS THAT ARE SPECIFICALLY REFERENCED SHALL BECOME PART OF THESE DRAWINGS AS THOUGH STATED HEREIN IN FULL. IN CASE OF A DISCREPANCY BETWEEN THE STANDARD SPECIFICATIONS AND THE REQUIREMENTS STATED WITHIN THE DRAWINGS, THE REQUIREMENTS STATED WITHIN THE DRAWINGS SHALL PREVAIL.
- ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE DESIGN PLANS, SPECIFICATIONS, AND THE ORDER OF CONDITIONS ISSUED FOR THE PROJECT.
- ALL CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE MAINTAINED WITHIN THE LIMITS OF THE PROJECT AS SHOWN ON SHEET C-101.
- THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS OF THE JOB SITE, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY DURING THE PERFORMANCE OF THE WORK. SAFETY PROVISIONS SHALL COMPLY WITH LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS. THESE REQUIREMENTS SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD BEFORE ORDERING ANY MATERIALS, COMMENCING ANY FABRICATION, OR PERFORMING ANY WORK. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING, OF ANY CONDITIONS OR DIMENSIONS WHICH VARY FROM THOSE SHOWN IN THE DRAWINGS AND INCORPORATE SUCH VARIATIONS IN THE CONSTRUCTION AS APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL NOTIFY DIGSAFE AT 1-888-344-7233 AND OTHER UTILITY OWNERS IN THE AREA NOT ON THE DIGSAFE LIST AT LEAST 3 BUSINESS DAYS PRIOR TO ANY DIGGING, TRENCHING, ROCK REMOVAL, DEMOLITION, BORING, BACKFILLING, GRADING, LANDSCAPING, PILE DRIVING, DRILLING, OR ANY OTHER BELOW GRADE OPERATIONS.
- LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. IN ADDITION, SOME UTILITIES MAY NOT BE SHOWN. DETERMINE THE EXACT LOCATION OF UTILITIES BY TEST PIT OR OTHER METHODS, AS NECESSARY TO PREVENT DAMAGE TO UTILITIES AND/OR INTERRUPTION IN UTILITY SERVICE. PERFORM TEST PIT EXCAVATIONS AND OTHER INVESTIGATIONS TO LOCATE UTILITIES, AND PROVIDE THIS INFORMATION TO THE ENGINEER, PRIOR TO CONSTRUCTING THE PROPOSED IMPROVEMENTS LOCATE ALL EXISTING UTILITIES TO BE CROSSED BY HAND EXCAVATION.
- NO OPEN TRENCHES WILL BE ALLOWED OVER NIGHT. THE USE OF ROAD PLATES TO PROTECT THE EXCAVATION WILL BE CONSIDERED UPON REQUEST, BUT BACKFILLING IS PREFERRED.
- MAINTAIN EMERGENCY ACCESS TO ALL PROPERTIES WITHIN THE PROJECT AREA AT ALL TIMES DURING CONSTRUCTION.
- ALL PROPOSED WORK MAY BE ADJUSTED IN THE FIELD BY THE OWNER'S PROJECT REPRESENTATIVE TO MEET EXISTING CONDITIONS.
- CONTRACTOR TO OBTAIN, PAY FOR AND COMPLY WITH PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK. ARRANGE AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE JURISDICTIONAL AUTHORITIES.
- BOLD TEXT AND LINES INDICATE PROPOSED WORK. LIGHT TEXT AND LINES INDICATE APPROXIMATE EXISTING CONDITIONS.

EROSION & SEDIMENT CONTROL NOTES

- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION CONTROL AND PROTECTION OF DRAINAGE STRUCTURES UNTIL COMPLETION OF SITEWORK AND ESTABLISHMENT OF VEGETATIVE GROUND COVER.
- THE CONTRACTOR SHALL PRACTICE GOOD HOUSEKEEPING MEASURES DURING THE DAY-TO-DAY OPERATION AT THE SITE. THE SITE SHOULD BE MEASURED DAILY TO REMOVE ANY LITTER OR DEBRIS.
- TEMPORARY SOIL MATERIAL STOCKPILES SHALL BE SURROUNDED WITH SILTATION BARRIER ON THE DOWNGRADIENT SIDE TO PREVENT DISCHARGE OF SEDIMENT FROM SITE. MATERIAL STOCKPILES THAT ARE IN PLACE FOR AN EXTENDED PERIOD OF TIME SHALL BE STABILIZED WITH VEGETATION, MULCHING, EROSION CONTROL BLANKETS, AND OTHER MEASURES THAT ARE NECESSARY TO PREVENT THE DISCHARGE OF SEDIMENT FROM THE PROJECT SITE.
- IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS.
- LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
- PROVIDE ALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN, SPECIFIED, REQUIRED BY PERMIT, AND/OR REQUIRED BY THE ENGINEER PRIOR TO ANY CONSTRUCTION OR IMMEDIATELY UPON REQUEST. MAINTAIN SUCH CONTROL MEASURES UNTIL FINAL SURFACE TREATMENTS ARE IN PLACE AND/OR UNTIL PERMANENT VEGETATION IS ESTABLISHED. INSPECT AFTER EACH RAINSTORM AND DURING MAJOR STORM EVENTS TO CONFIRM THAT ALL SEDIMENTATION AND EROSION CONTROL MEASURES REQUIRED ARE IN PLACE AND EFFECTIVE.
- PRIOR TO STARTING WORK, CLEARLY MARK WORK LIMITS. DO NOT DISTURB THE AREA BEYOND THE PROPOSED LIMITS. COORDINATE WITH THE ENGINEER FOR LOCATIONS OF TEMPORARY STOCKPILING OF TOPSOIL DURING CONSTRUCTION.
- INSTALL SILT SACKS OR OTHER APPROVED SEDIMENTATION BARRIERS IN ALL CATCH BASINS IN THE PROJECT AREA.
- COMPACT, STABILIZE, AND LOAM AND SEED SIDE SLOPES, SHOULDER AREAS AND DISTURBED VEGETATED AREAS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND AS REQUIRED BY PERMITS. GRADE SIDE SLOPES, SHOULDER AREAS AND DISTURBED VEGETATED AREAS TO A MAXIMUM SLOPE OF 3 HORIZONTAL TO 1 VERTICAL (3H:1V), WHERE POSSIBLE PROVIDE BIODEGRADABLE EROSION CONTROL BLANKETS TO PREVENT EROSION WHERE SLOPES ARE STEEPER THAN 3H:1V.
- REMOVE AND PROPERLY DISPOSE OF SILT TRAPPED AT BARRIERS IN UPLAND AREAS OUTSIDE BUFFER ZONES. REMOVE MATERIALS DEPOSITED IN ANY TEMPORARY SETTLING BASINS AT THE COMPLETION OF THE PROJECT. RESTORE ALL DISTURBED AREAS TO THEIR PRE-CONSTRUCTION CONDITION.
- SWEEP, COLLECT, REMOVE AND DISPOSE OF ANY SEDIMENT TRACKED ONTO PUBLIC RIGHT-OF-WAYS AT THE END OF EACH DAY.
- ALL HYDRAULIC EQUIPMENT SHALL UTILIZE BIODEGRADABLE, VEGETABLE BASED, NON-TOXIC AND NON-POLLUTING HYDRAULIC FLUID.
- STORE FUEL, OIL, PAINT, OR OTHER HAZARDOUS MATERIALS IN A SECONDARY CONTAINER AND REMOVE TO A SECURE LOCKED AND COVERED AREA DURING NON-WORK HOURS.

GENERAL EARTHWORK

- EXCAVATION SLOPE GEOMETRY AND THE PROTECTION OF THE EXISTING UTILITIES AND STRUCTURES ADJACENT TO THE WORK AREA IS THE CONTRACTOR'S RESPONSIBILITY. PRIOR TO EXCAVATION, SAWCUT THE EXISTING ASPHALT PAVEMENT WITHIN THE APPROXIMATE LIMITS OF THE EXCAVATION TO PROVIDE A CLEAN AND STRAIGHT LINE FOR SURFACE RESTORATION.
- THE EXCAVATION BOTTOM SHALL BE CAREFULLY SHAPED TO CONFORM TO THE SHAPE OF THE FOUNDATION. THE PREPARED EXCAVATION BOTTOM SHALL BE FREE OF ORGANIC MATERIAL, LARGE STONES OR BOULDERS, AND SIMILAR OBJECTS/MATERIALS.
- FOUNDATION MATERIAL SHALL BE EXCAVATED ON-SITE GRANULAR MATERIAL. FREE FROM STONES, ROOTS, AND ORGANIC MATERIAL, AND OF SUITABLE GRADATION FOR SATISFACTORY COMPACTION. IF EXCAVATED MATERIAL AT A PARTICULAR LOCATION IS NOT AVAILABLE (SEE SECTION MATERIAL HANDLING) OR IS NOT SATISFACTORY, USE IMPORTED GRANULAR MATERIAL CONFORMING TO CONTRACT SPECIFICATIONS.
- ALL FOUNDATIONS AND SLABS ARE TO BEAR ON UNFROZEN, UNDISTURBED MATERIAL OR UNFROZEN ENGINEERED COMPACTED FILL. IT IS THE CONTRACTORS RESPONSIBILITY TO ASSURE THAT THE SOILS BELOW THE FOOTINGS REMAIN UNFROZEN.
- ALL COMPACTED FOUNDATION SUB-GRADE FILL MATERIALS SHALL BE FREE OF ORGANIC MATERIAL AND BE COMPACTED TO A MINIMUM OF 98% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698, AND OBTAIN A MINIMUM ALLOWABLE BEARING PRESSURE AS SET FORTH ABOVE.
- SITE TO BE GRADED SMOOTHLY AND EVENLY IN ACCORDANCE WITH THE DESIGN PLANS. CONTRACTOR IS RESPONSIBLE FOR ENSURING A POSITIVE DRAINAGE FLOW TO ALL DRAINAGE INLETS WITHOUT CREATING ANY FLAT SPOTS THAT WILL RESULT IN STANDING WATER.

EARTHWORK MATERIALS

- GRAVEL BORROW, SHALL BE M1.03.0 TYPE B AS SPECIFIED IN THE STANDARD SPECIFICATIONS SECTION M1.03.0: GRAVEL BORROW.
- CRUSHED STONE, SHALL BE M2.01.4 PER TABLE M2.01.0-1 AS SPECIFIED IN THE STANDARD SPECIFICATIONS SECTION M2.01.0: CRUSHED STONE.
- PROCESSED GRAVEL BASE, SHALL BE M1.03.1: PROCESSED GRAVEL FOR SUB-BASE AS SPECIFIED IN THE STANDARD SPECIFICATIONS.
- DENSE SUB-BASE SHALL BE M2.01.7: DENSE GRADED CRUSHED STONE FOR SUB-BASE AS SPECIFIED IN THE STANDARD SPECIFICATIONS.
- BITUMINOUS PAVEMENT MATERIALS REFERENCED IN TYPICAL DETAILS SHALL BE IN COMPLIANCE WITH THE MATERIALS SPECIFIED IN SECTION M3: ASPHALTIC MATERIALS IN THE STANDARD SPECIFICATIONS.

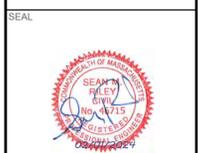
CONCRETE NOTES

- ALL CONCRETE WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
 - THE STANDARD SPECIFICATIONS TO DATE.
 - THE AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318-08.
- CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED UNDER THE SUPERVISION OF THE APPROVED TESTING AGENCY.
- ALL CONCRETE MIX DESIGNS SHALL BE SIMILAR TO THAT PROVIDED AND APPROVED BY MassDOT. VARIATIONS IN THE MIX DESIGN SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. CONCRETE USED IN PRECAST MEMBERS SHALL CONFORM WITH M4.06.01 (HIGH PERFORMANCE CEMENT CONCRETE):
 - 28-DAY STRENGTH = 5,000 PSI
 - MINIMUM CEMENT PER CY OF CONCRETE = 685 LBS
 - AIR ENTRAINED 6.5±1.5%
 - SILICA FUME 6±1% (DRY WEIGHT)
 - MAXIMUM WATER/CEMENT RATIO = 0.40
 - SLUMP = 2 TO 5 IN (TARGET = 4 IN)
 - MAXIMUM SIZE COARSE AGGREGATE = 3/4"
- ALL CONCRETE SHALL BE AIR-ENTRAINED TO 6.5± 1.5%.
- CONCRETE SHALL BE CURED FOR A MINIMUM OF SEVEN DAYS BEFORE ANY LOADS ARE APPLIED THERETO.
- PROVIDE A STEEL TROWELED FINISH FOR SLABS-ON-GRADE AND A BROOM FINISH FOR EXTERIOR SLABS.
- ALL CONCRETE SHALL BE PLACED IN THE DRY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULFILLING THE TESTING REQUIREMENTS FOR ALL CONCRETE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- DURING COLD WEATHER CONDITIONS ADEQUATE EQUIPMENT SHALL BE PROVIDED FOR HEATING CONCRETE MATERIALS AND PROTECTING CONCRETE DURING FREEZING OR NEAR FREEZING WEATHER.
- DURING HOT WEATHER CONDITIONS, ATTENTION SHALL BE GIVEN TO INGREDIENTS, PRODUCTION METHODS, HANDLING, PLACING, PROTECTION, AND CURING TO PREVENT EXCESSIVE CONCRETE TEMPERATURES OR WATER EVAPORATION THAT WOULD IMPAIR REQUIRED STRENGTH OR SERVICEABILITY OF THE STRUCTURE.
- ALL EQUIPMENT ANCHOR BOLTS FURNISHED BY EQUIPMENT MANUFACTURER ARE TO BE INSTALLED BY THE CONTRACTOR, AND SHALL BE STAINLESS STEEL OR HOT-DIPPED GALVANIZED AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING CONCRETE MIX DESIGNS AND SPECIFICATION SHEETS FOR ALL ADMIXTURES FOR APPROVAL BY THE ENGINEER PRIOR TO THE PLACEMENT OF ANY CONCRETE.

PLANTING NOTES

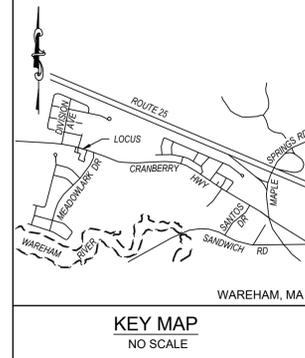
- CONTRACTOR TO FOLLOW SPECIFICATIONS FOR SOIL CONDITIONING, PLANT AND TREE SPECIFICATION AND PROTECTION AS REQUIRED ON LANDSCAPE DRAWINGS.

THIS DRAWING IS PREPARED FOR PERMITTING PURPOSES ONLY AND SHALL NOT BE USED FOR CONSTRUCTION. CONTRACTOR SHALL OBTAIN FINAL CONSTRUCTION DETAILS FROM THE ENGINEER PRIOR TO PREPARATION OF CONSTRUCTION BID AND BEFORE BEGINNING ANY WORK.



DATE	2024-01-30
DRAWN BY	MDC
CHECKED BY	DAV
PROJECT NUMBER	C19495.00
PROJECT STATUS	SITE PLAN REVIEW SET
SHEET DESCRIPTION	LEGEND, ABBREVIATIONS AND GENERAL NOTES
SHEET TITLE	G-002
SHEET NUMBER	SHEET 02 OF 09

PROJECT CLIENT NAME: GRACE LIGHTHOUSE CHURCH
 ADDRESS: 2703 CRANBERRY HIGHWAY WAREHAM, MA 02571



NO.	DATE	REVISION	BY
1	12/27/2023	UPDATE ZONING AND NOTES	JDM

ZONING CLASSIFICATION:

CG (COMMERCIAL GENERAL) NONRESIDENTIAL USE

- MINIMUM REQUIREMENTS:
- AREA: 40,000 S.F.
 - FRONTAGE: 150 FT.
 - SETBACKS:
 - FRONT MIN.: 20 FT.
 - FRONT MAX.: 80 FT.
 - SIDE: 15 FT.
 - REAR: 15 FT.
 - MAXIMUM BUILDING HEIGHT: 42 FT.

REFERENCE:

ASSESSORS MAP 133, PARCELS 1000B1, 1000C
 DEED BOOK 51743, PAGE 87
 DEED BOOK 52558, PAGE 299
 PLAN BOOK 56, PAGE 1107
 PLAN BOOK 54, PAGE 916
 OWNER: GRACE LIGHTHOUSE FELLOWSHIP

NOTES:

- THIS PLAN IS THE RESULT OF AN INSTRUMENT SURVEY PERFORMED ON 06-12-2022, 10-08-22 AND 06-12-23.
- EXISTING UTILITIES, UNDERGROUND AND OVERHEAD, MAY EXIST IN ADDITION TO THE UTILITY INFORMATION SHOWN ON THESE PLANS. THIS PLAN MUST NOT BE USED TO LOCATE UNDERGROUND UTILITIES. CALL DIG SAFE AT 811 PRIOR TO STARTING ANY EXCAVATION.
- THIS SURVEY HAS BEEN PERFORMED WITHOUT THE BENEFIT OF A TITLE SEARCH AND MAY NOT REVEAL ANY FACTS THAT WOULD BE DISCLOSED BY ONE.
- ZONING MAP INDICATES PARCEL IS LOCATED IN THE MR-30 ZONING DISTRICT. REFERENCE TOWN MEETING 4/26/2010 ARTICLE 56 REZONING LOTS 1000.26 AND 27 ON MAP 133 FROM MR-30 TO COMMERCIAL GENERAL (CG) DISTRICT.

I HEREBY CERTIFY THAT THE CONDITIONS SHOWN HEREON ARE ON THE GROUND AS OF FIELD SURVEY 06-12-2023.
 DATE: DECEMBER 27, 2023

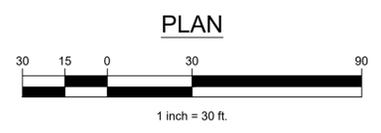
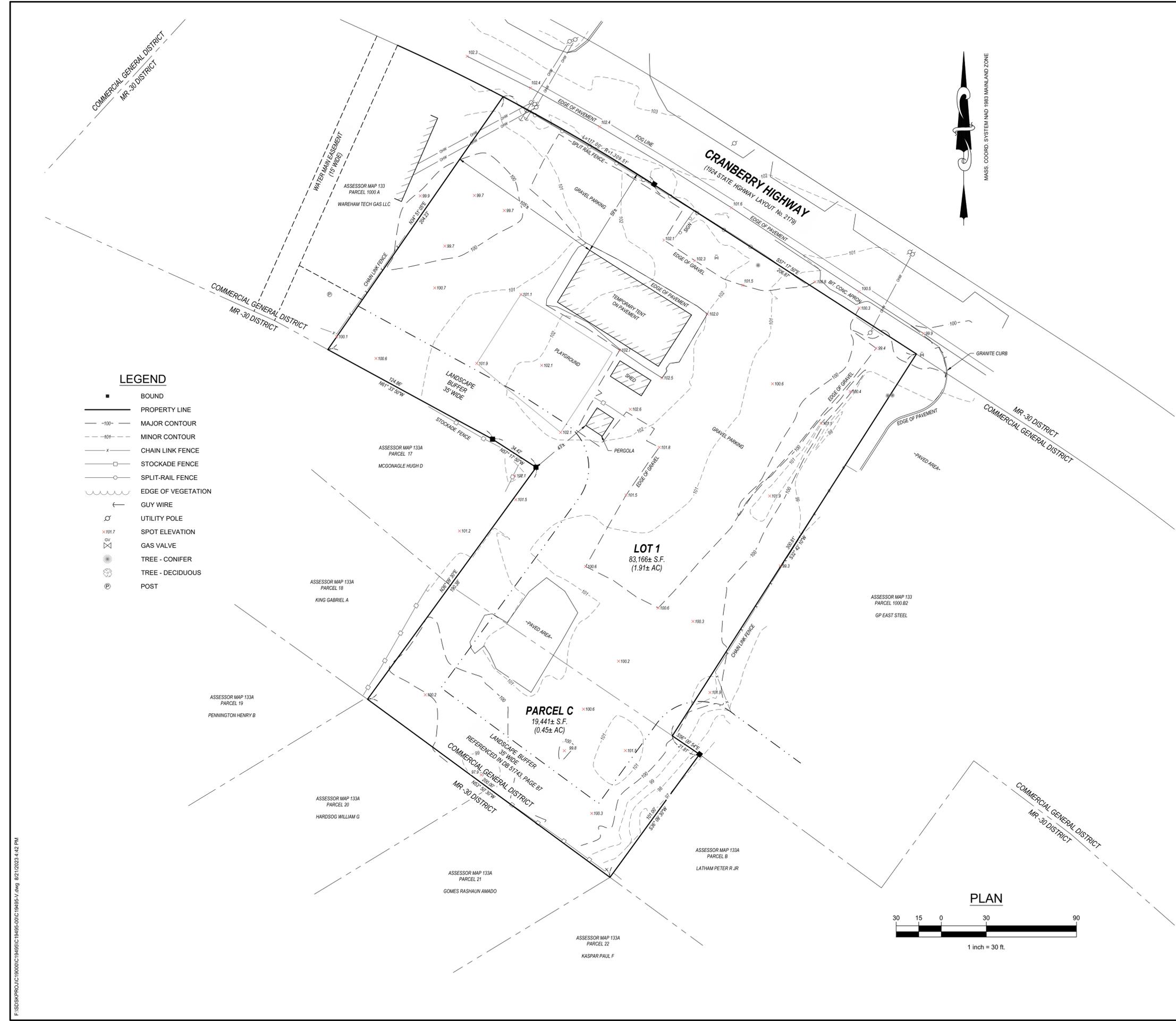


PROJECT: GRACE LIGHTHOUSE CHURCH
 2703 CRANBERRY HIGHWAY
 WAREHAM, MA
 SHEET TITLE: EXISTING CONDITIONS PLAN

SCALE	1" = 30'
DRAWING FILE	C19495-V.dwg
DATE	07-17-2023
DRAWN BY	DAV
CHECKED BY	JDM

PROJECT NO. C19495.00
 V-101
 1 OF 1 SHEETS

- LEGEND**
- BOUND
 - PROPERTY LINE
 - MAJOR CONTOUR
 - MINOR CONTOUR
 - CHAIN LINK FENCE
 - STOCKADE FENCE
 - SPLIT-RAIL FENCE
 - EDGE OF VEGETATION
 - GUY WIRE
 - UTILITY POLE
 - SPOT ELEVATION
 - GAS VALVE
 - TREE - CONIFER
 - TREE - DECIDUOUS
 - POST

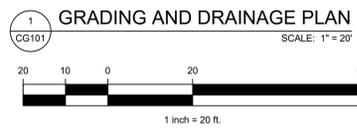
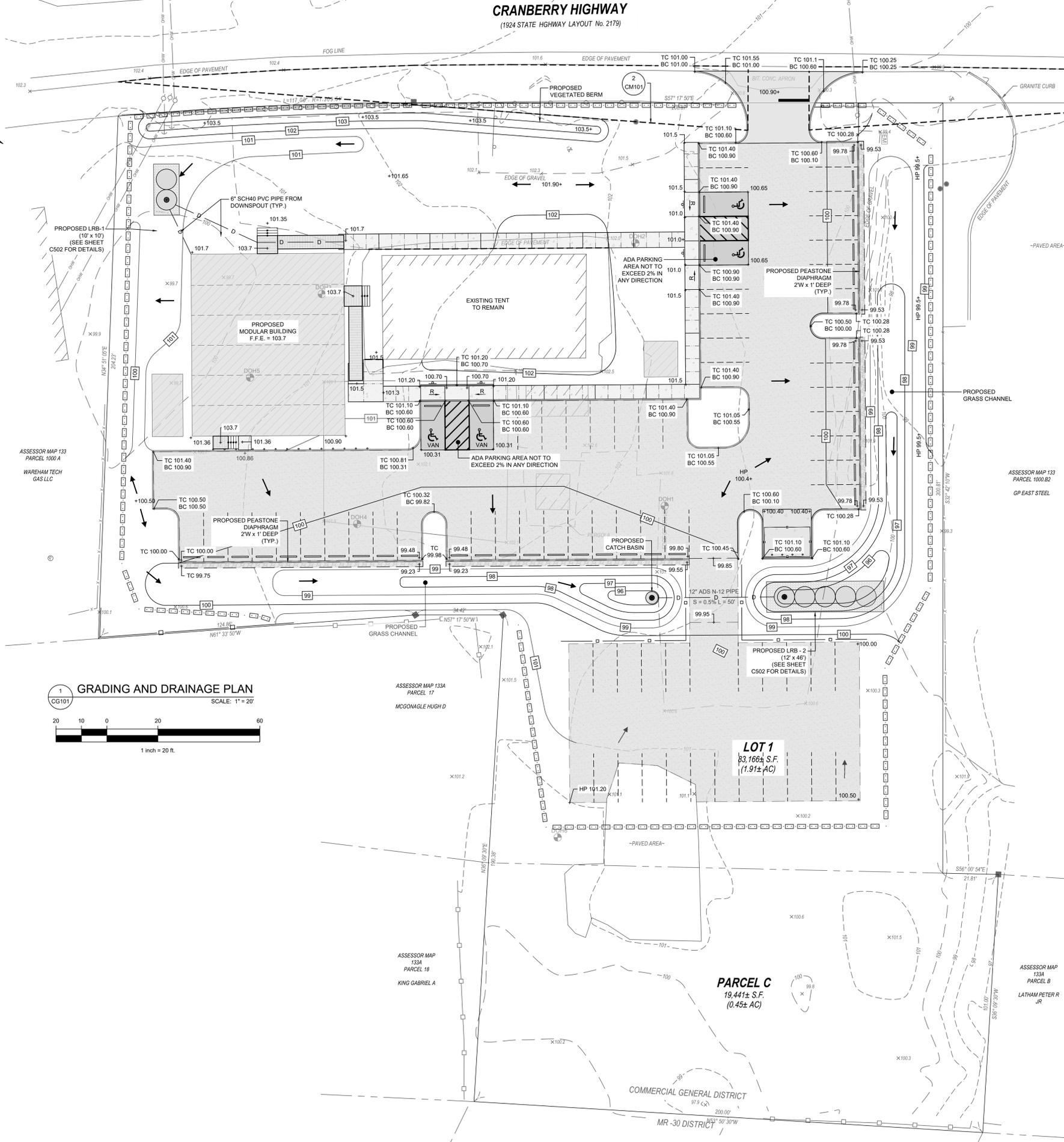


F:\SDSKPROJECTS\19495\19495-C\19495-C-01\19495-V.dwg 8/21/2023 4:42 PM

Coastal Engineering Co., Inc. © 2023



CRANBERRY HIGHWAY
(1924 STATE HIGHWAY LAYOUT No. 2179)



THIS DRAWING IS PREPARED FOR PERMITTING PURPOSES ONLY AND SHALL NOT BE USED FOR CONSTRUCTION. CONTRACTOR SHALL OBTAIN FINAL CONSTRUCTION DETAILS FROM THE ENGINEER PRIOR TO PREPARATION OF CONSTRUCTION BID AND BEFORE BEGINNING ANY WORK.



REV	DATE	DESCRIPTION	DWN	CHK

GRACE LIGHTHOUSE CHURCH
2703 CRANBERRY HIGHWAY
WAREHAM, MA 02571

DATE: 2024-01-30
DRAWN BY: MDC/DAP
CHECKED BY: DAV
PROJECT NUMBER: C19495.00
PROJECT STATUS: SITE PLAN REVIEW SET

SHEET DESCRIPTION: GRADING AND DRAINAGE PLAN

SHEET TITLE: CG101

SHEET NUMBER: SHEET 06 OF 09



ZONING TABLE - COMMERCIAL GENERAL (CG)

SUBJECT: ASSESSORS MAP 14 PARCEL 76	REQUIRED	EXISTING	PROPOSED
LOT AREA (PARCEL 1 AND C)	40,000 S.F.	102,607 S.F. (2.4± AC)	NO CHANGE
FRONTAGE	150 FT.	323.87 FT.	NO CHANGE
FRONT SETBACK	20 FT. MIN / 80 FT. MAX.	59± FT. (TENT)	56.1± FT. (MODULAR BUILDING)
SIDE SETBACK	15 FT.*	105± FT. (TENT)	17.1± FT. (RELOCATED SHED)
REAR SETBACK	15 FT.*	43± FT. (PERGOLA)	72.0± FT. (MODULAR BUILDING)
MAXIMUM BUILDING FOOTPRINT**	30,000 S.F.	300± S.F. (SHED)	4,746± S.F.
MAXIMUM BUILDING COVERAGE**	40 %	300± S.F. (0.3%)	4,746± S.F. (4.6%)
MAXIMUM IMPERVIOUS SURFACE	60 %	38,690± S.F. (37.7%)	43,216± S.F. (42.1%)
MINIMUM PERVIOUS SURFACE***	30 %	68,028± S.F. (66.3%)	48,227± S.F. (47.0%)****
BUILDING HEIGHT	42 FT.	N/A	LESS THAN 42 FT.
STRUCTURE FROM RESIDENTIAL ZONE	30 FT.	43± FT. (PERGOLA)	72± FT. (MODULAR BUILDING)

* DISTRICT SETBACK IS 15'. LANDSCAPE SETBACK IS 20' DUE TO COMMERCIAL TO RESIDENTIAL USE
 ** DOES NOT INCLUDE TEMPORARY STRUCTURE
 *** REQUIRED PER SECTION 763.1 AND 763.2 (LANDSCAPE DESIGN STANDARDS)
 **** EXCLUDES GRASS CHANNEL SWALES

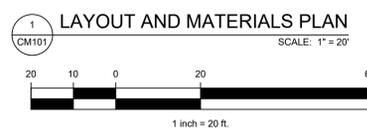
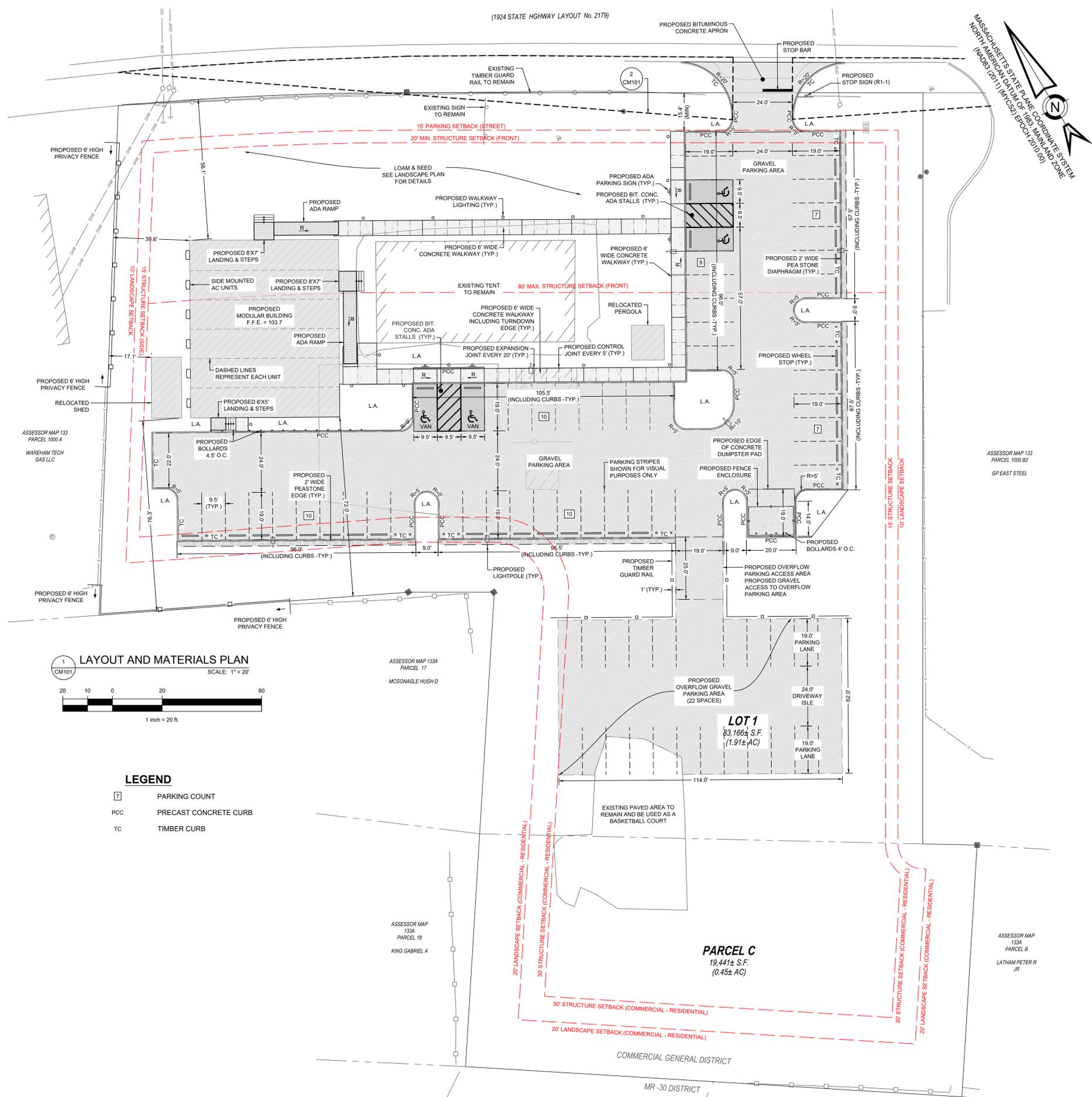
PARKING TABLE

USE*	TYPE	REQUIRED	PROPOSED	MIN. REQUIRED	PROVIDED
CHURCH*	STANDARD	1 SPACE FOR 3 OCCUPANTS PLUS 1 PER 2 EMPLOYEES	196 OCCUPANTS 2 EMPLOYEES	68 SPACES	75 SPACES**
ADA***		4 PER 76 - 100 STALLS		4 SPACES	4 SPACES

* WAREHAM ZONING BYLAW DOES NOT PROVIDE A PARKING COUNT FOR HOUSE OF WORSHIP. NEIGHBORING TOWNSHIP OF MIDDLEBORO ZONING BYLAW SECTION 5.3.2 WAS USED TO DETERMINE PARKING COUNT.
 ** ADDITIONAL OVERFLOW PARKING IS INCLUDED IN THE CALCULATION PROVIDED WITHIN THE DESIGNATED AREA FOR SPECIAL EVENTS (22 SPACES)
 *** PER 521 CMR 23.00 PARKING AND PASSENGER LOADING ZONES

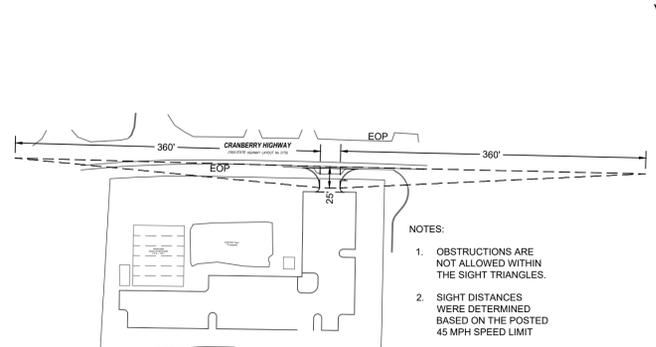
PARKING AREA AISLES TABLE

PARKING ANGLE (DEGREES)	AISLE WIDTH (ONE WAY)	AISLE WIDTH (TWO WAY)
90	24	24



LEGEND

- 7 PARKING COUNT
- PCC PRECAST CONCRETE CURB
- TC TIMBER CURB



- NOTES:
- OBSTRUCTIONS ARE NOT ALLOWED WITHIN THE SIGHT TRIANGLES.
 - SIGHT DISTANCES WERE DETERMINED BASED ON THE POSTED 45 MPH SPEED LIMIT

LANDSCAPE NOTE:

SEE PLAN SHEET L1.0 AND L2.0, DATED 01-30-2024 FOR LANDSCAPE DESIGN

REFERENCE:

EXISTING CONDITIONS IS SHOWN BASED ON A PLAN TITLED "EXISTING CONDITIONS PLAN" FOR GRACE LIGHTHOUSE CHURCH STAMPED ON 12-27-2023

THIS DRAWING IS PREPARED FOR PERMITTING PURPOSES ONLY AND SHALL NOT BE USED FOR CONSTRUCTION. CONTRACTOR SHALL OBTAIN FINAL CONSTRUCTION DETAILS FROM THE ENGINEER PRIOR TO PREPARATION OF CONSTRUCTION BID AND BEFORE BEGINNING ANY WORK.

PROJECT/CLIENT NAME
GRACE LIGHTHOUSE CHURCH

ADDRESS
 2703 CRANBERRY HIGHWAY
 WAREHAM, MA 02571

DATE
 2024-01-30

DRAWN BY
 MDC/DAP

CHECKED BY
 DAV

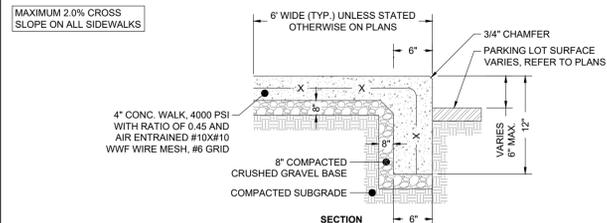
PROJECT NUMBER
 C19495.00

PROJECT STATUS
SITE PLAN REVIEW SET

SHEET DESCRIPTION
 LAYOUT AND MATERIALS PLAN

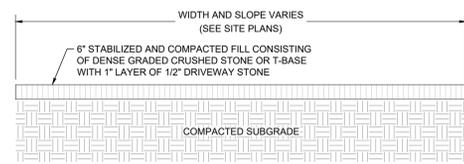
SHEET TITLE
CM101

SHEET NUMBER
 SHEET 05 OF 09

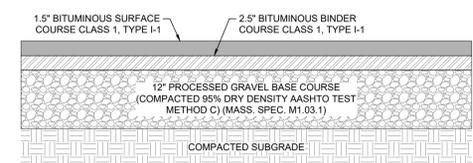


- EXPANSION JOINT INSTALLATION NOTES:**
- DOWEL IS TYPICAL AT ALL EXPANSION JOINTS (18" O.C.) WITHIN CONCRETE PAVING AND BETWEEN NEW CONCRETE PAVING AND EXISTING CONCRETE PAVING TO REMAIN.
 - EXPANSION JOINTS MAX. 25'-0" O.C. UNLESS SHOWN OTHERWISE.
 - EXPANSION JOINTS SHALL BE PLACED WHERE NEW CEMENT CONCRETE PAVEMENT MEETS EXISTING PAVEMENT OR WALLS TO REMAIN.
 - ALL CONTROL JOINTS SHALL BE SAW CUT.

CONCRETE WALKWAY WITH CONCRETE CURB
SCALE: N.T.S.

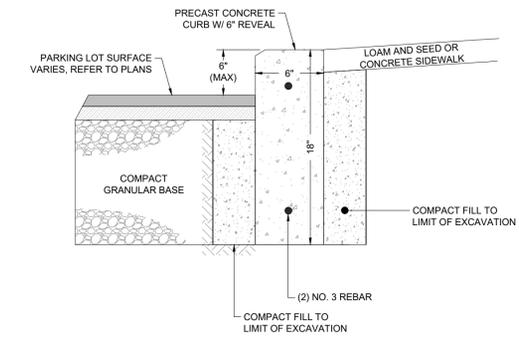


GRAVEL PARKING SECTION
SCALE: N.T.S.

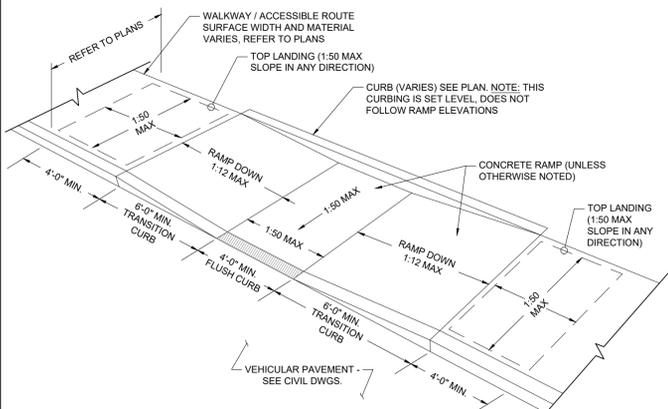


SOIL REMOVAL NOTE:
IN ALL AREAS OF PROPOSED PAVEMENT ALL UNSUITABLE MATERIAL INCLUDING TOPSOIL SHALL BE REMOVED AND REPLACED WITH CLEAN SAND & GRAVEL (TO SUBGRADE LEVEL) AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY

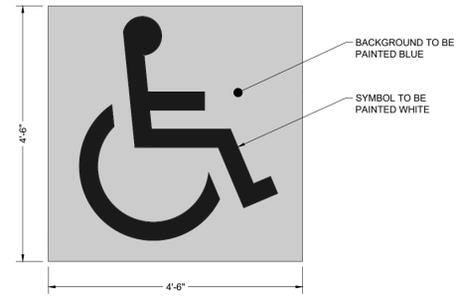
BITUMINOUS CONCRETE PARKING SECTION
SCALE: N.T.S.



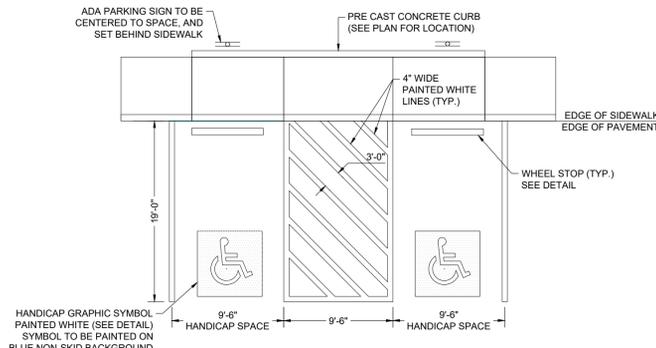
PRECAST CONCRETE CURB
SCALE: N.T.S.



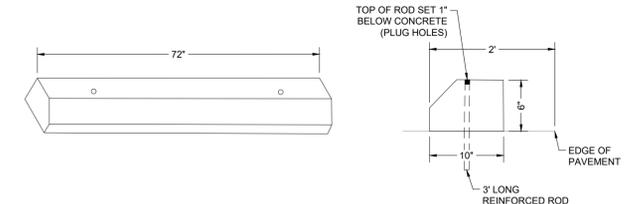
ADA RAMP
SCALE: N.T.S.



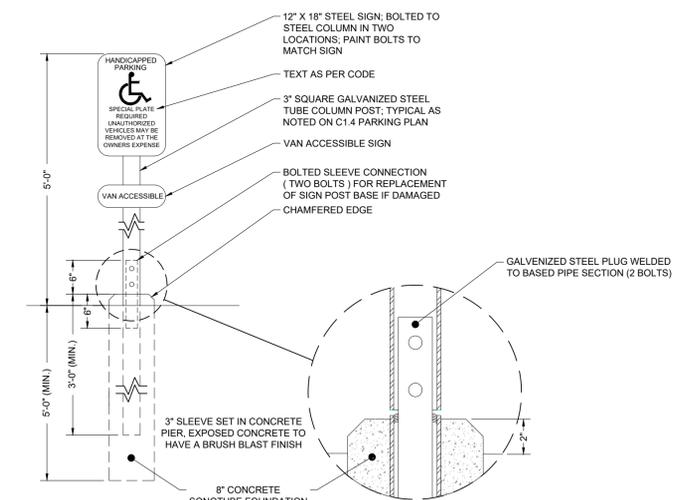
PAINTED SYMBOL OF ACCESSIBILITY
SCALE: N.T.S.



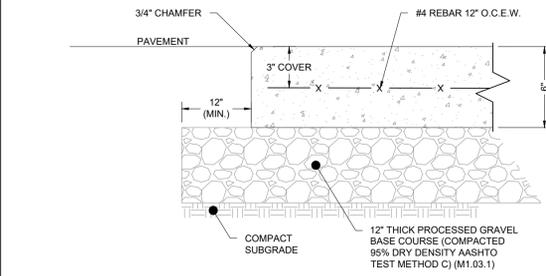
HANDICAP SPACE STRIPING
SCALE: N.T.S.



CONCRETE WHEELSTOP DETAIL
SCALE: N.T.S.

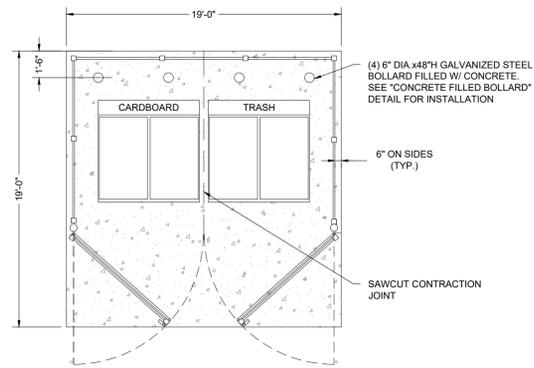


SYMBOL OF ACCESSIBILITY SIGN (VAN ACCESSIBLE)
SCALE: N.T.S.

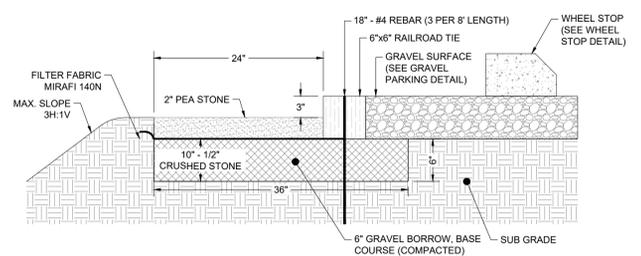


- DUMPSTER PAD NOTES:**
- ALL CONCRETE SHALL E 4000 PSI WITH MAXIMUM WATER CONTENT RATIO OF 0.45 AND AIR ENTRAINMENT.
 - CONTRACTOR SHALL TAKE GREAT CARE WHEN INSTALLING ADJACENT TO LEACH FIELD. CONTRACTOR SHALL NOT DAMAGE LEACH FIELD.

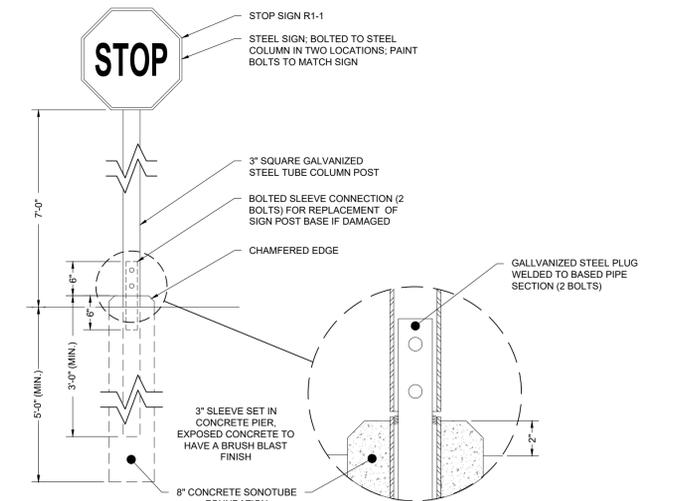
DUMPSTER PAD DETAIL
SCALE: N.T.S.



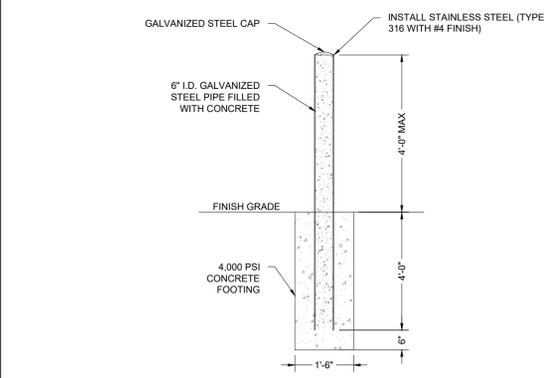
DUMPSTER PAD ENCLOSURE DETAIL
SCALE: N.T.S.



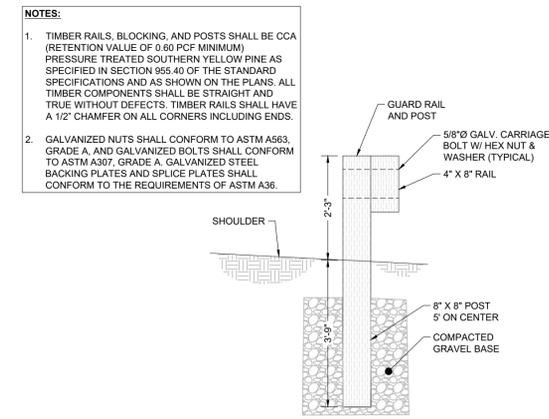
TIMBER CURB DETAIL
SCALE: N.T.S.



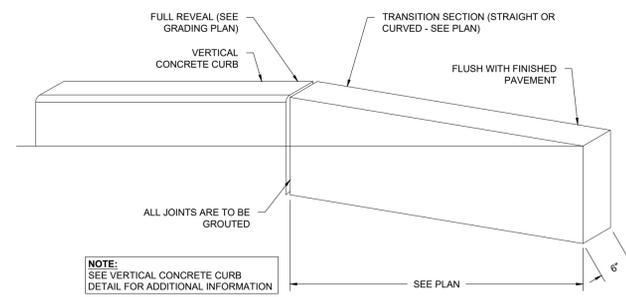
STOP SIGN DETAIL
SCALE: N.T.S.



CONCRETE FILLED BOLLARD
SCALE: N.T.S.



TIMBER GUARDRAIL SECTION
SCALE: N.T.S.



TRANSITION CURB DETAIL
SCALE: N.T.S.



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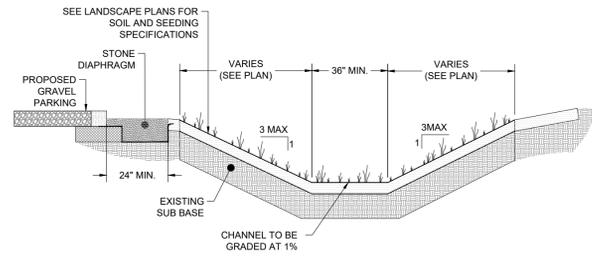


REV	DATE	DESCRIPTION	CHK	DWN

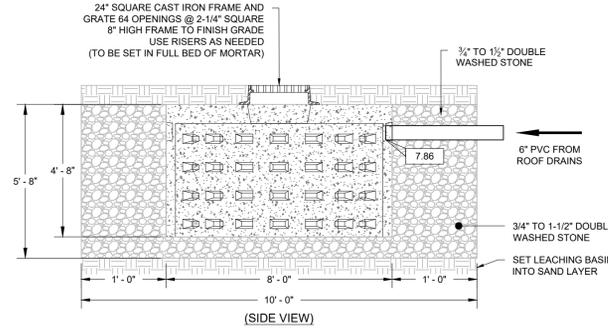
GRACE LIGHTHOUSE CHURCH

2703 CRANBERRY HIGHWAY
WAREHAM, MA 02571

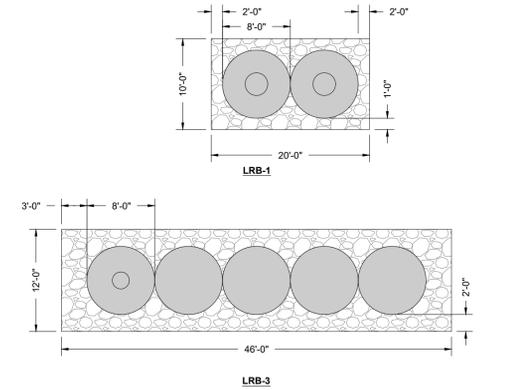
DATE	2024-01-30
DRAWN BY	MDC
CHECKED BY	DAV
PROJECT NUMBER	C19495.00
PROJECT STATUS	SITE PLAN REVIEW SET
SHEET DESCRIPTION	SITE DETAILS (SHEET 1)
SHEET TITLE	C-501
SHEET NUMBER	SHEET 08 OF 09



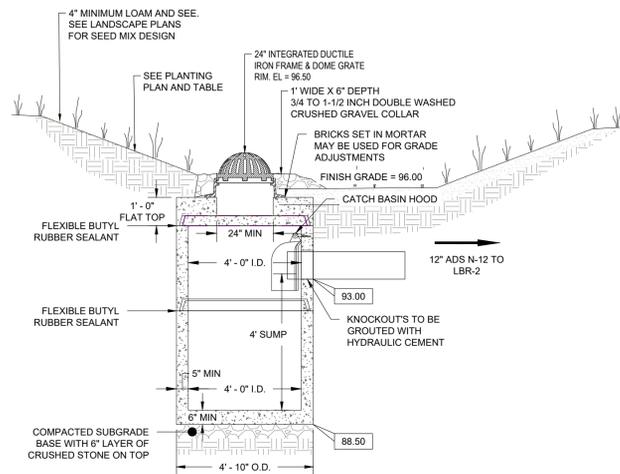
GRASSED CHANNEL SECTION
SCALE: N.T.S.



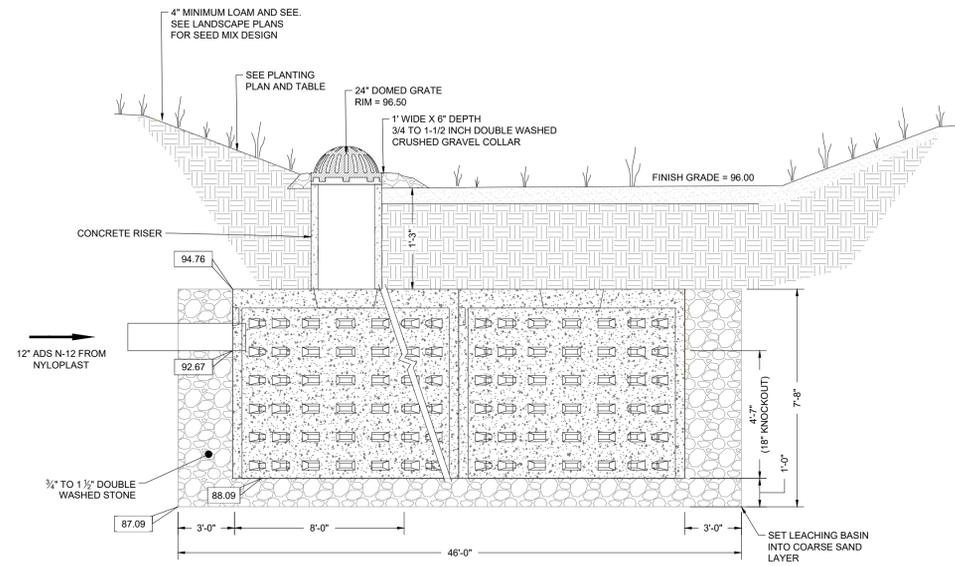
SIDE VIEW OF LEACHING RECHARGE BASINS - 1
SCALE: N.T.S.



PLAN VIEWS OF LEACHING RECHARGE BASINS (H-20)
SCALE: N.T.S.



SIDE VIEW OF CATCH BASIN



SIDE VIEW OF LEACHING RECHARGE BASINS - 2

REV	DATE	DESCRIPTION	DWN	CHK

GRACE LIGHTHOUSE CHURCH

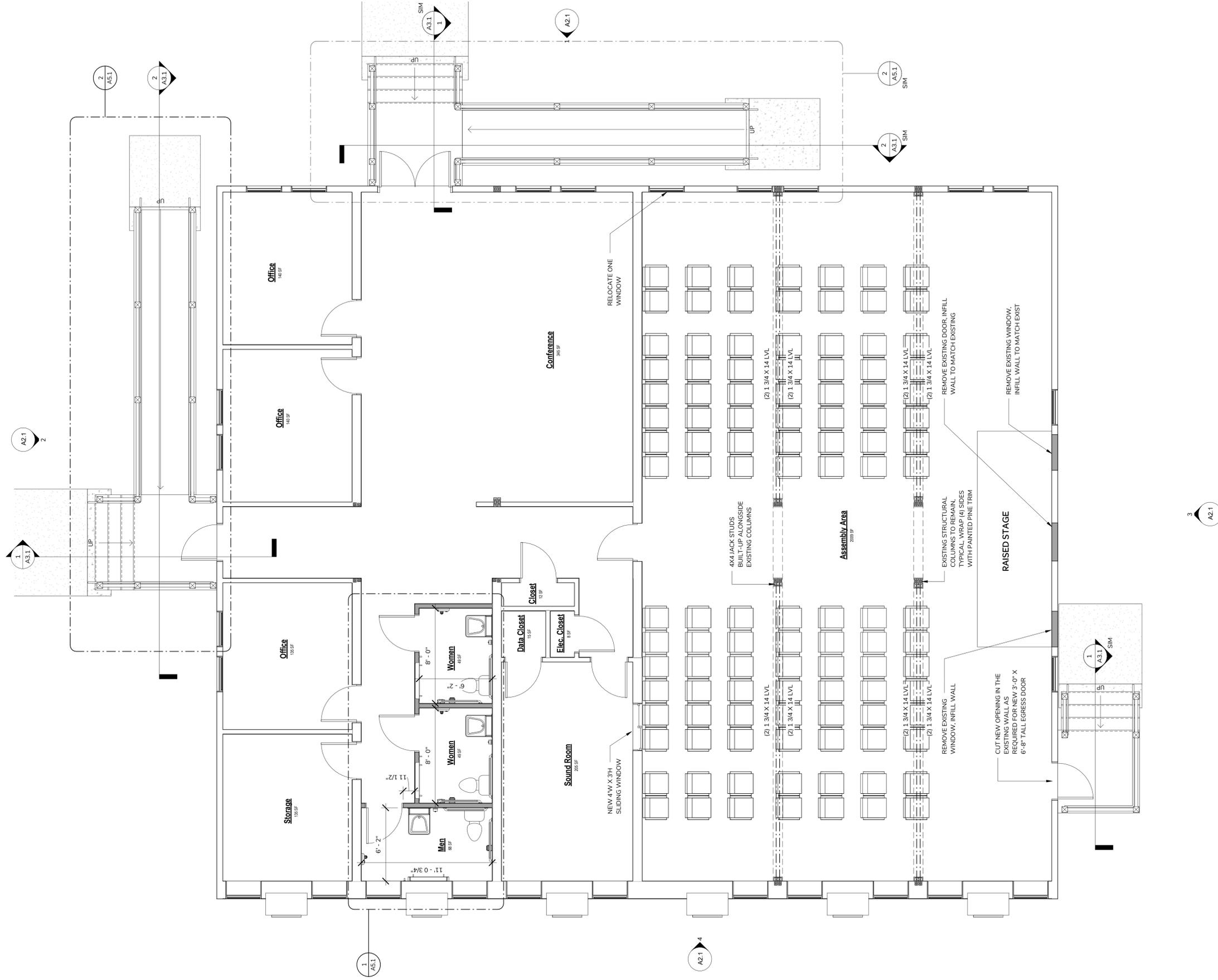
2703 CRANBERRY HIGHWAY
WAREHAM, MA 02571

PROJECT CLIENT NAME	GRACE LIGHTHOUSE CHURCH		
ADDRESS	2703 CRANBERRY HIGHWAY WAREHAM, MA 02571		
DATE	2024-01-30	CHECKED BY	DAV
DRAWN BY	MDC	PROJECT NUMBER	C19495.00
PROJECT STATUS	SITE PLAN REVIEW SET		
SHEET DESCRIPTION	SITE DETAILS (SHEET 2)		

SITE DETAILS (SHEET 2)

SHEET TITLE
C-502

SHEET NUMBER
SHEET 09 OF 09



1 CONCEPTUAL FLOOR PLAN
1/4" = 1'-0"

NEW CHURCH BUILDING CONCEPT STUDY
GRACE LIGHTHOUSE CHURCH
2703 CRANBERRY HIGHWAY
WAREHAM, MA

FLOOR PLAN

DATE ISSUED: 01/16/2024

REVISIONS:

NO.	DESCRIPTION	DATE

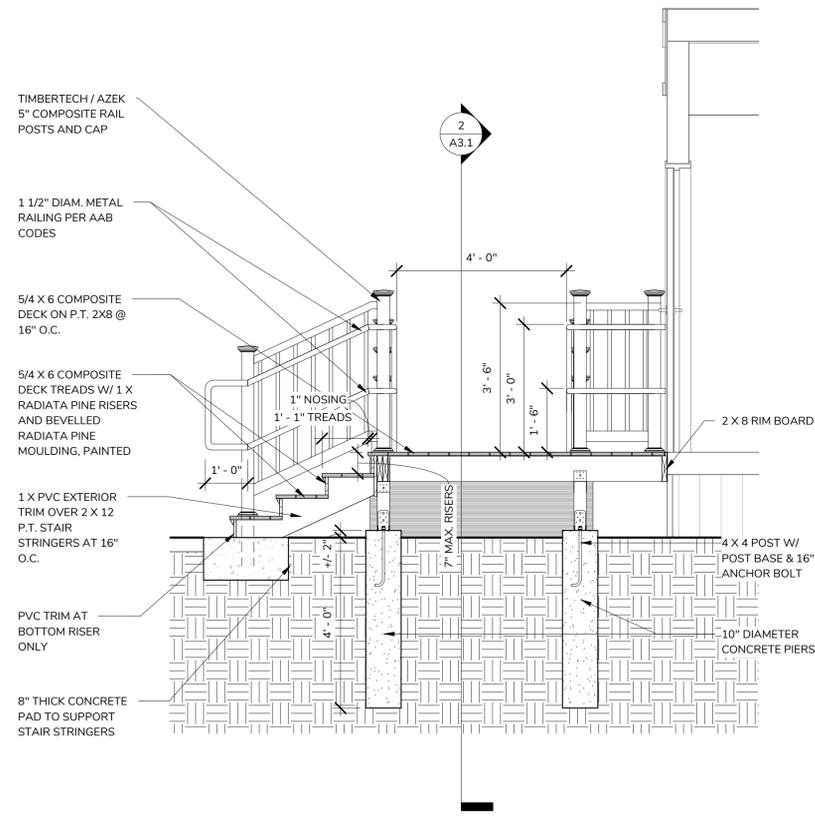
DRAWN BY: JD

SCALE: 1/4" = 1'-0"

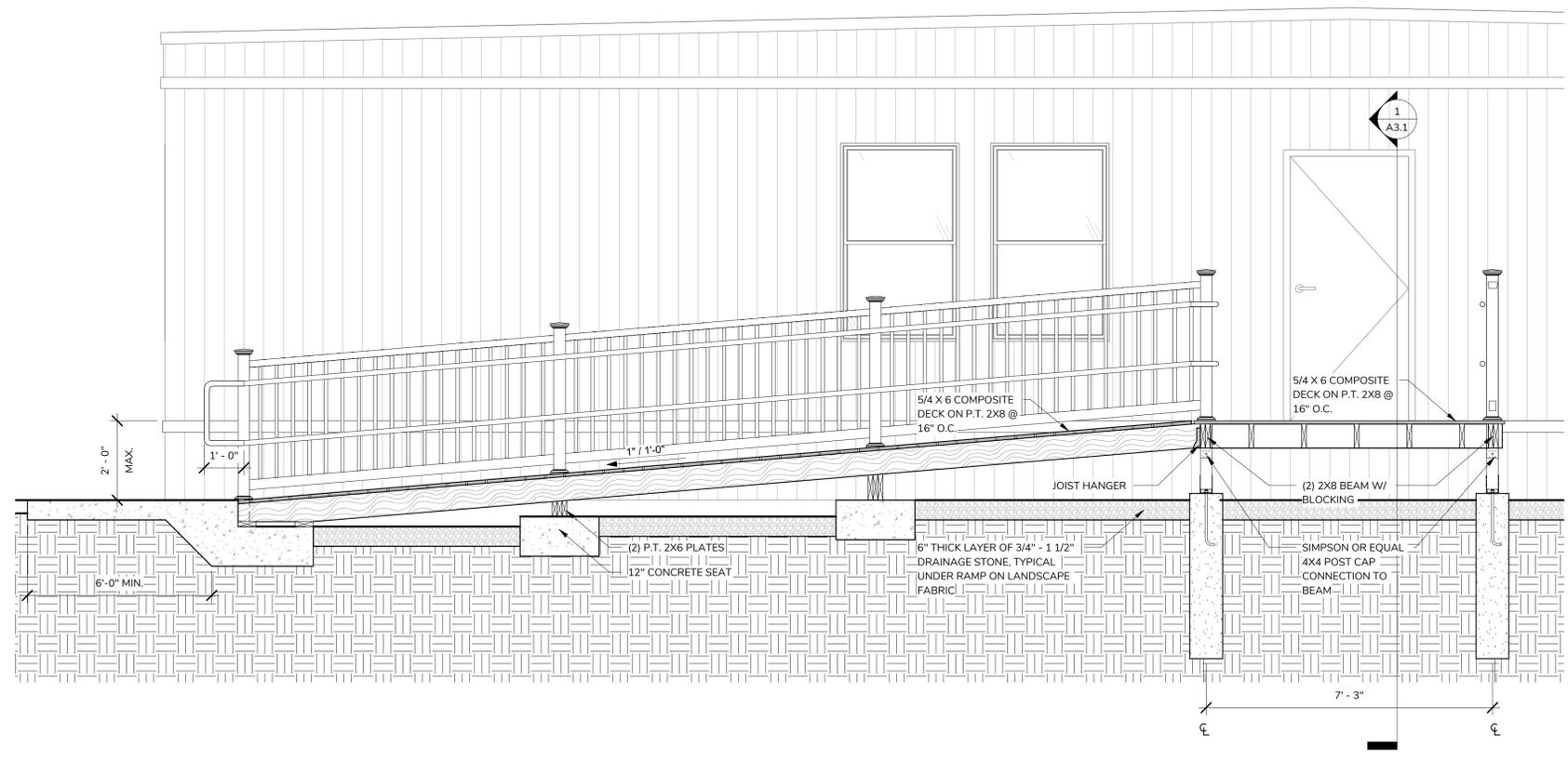
DRAWING NO:

A1.1

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1 STAIR SECTION
1/2" = 1'-0"



2 RAMP SECTION
1/2" = 1'-0"

NEW CHURCH BUILDING CONCEPT STUDY
GRACE LIGHTHOUSE CHURCH
2703 CRANBERRY HIGHWAY
WAREHAM, MA

SECTION @
STAIR & RAMP

DATE ISSUED: 01/16/2024

REVISIONS:

NO.	DESCRIPTION	DATE

DRAWN BY: JD

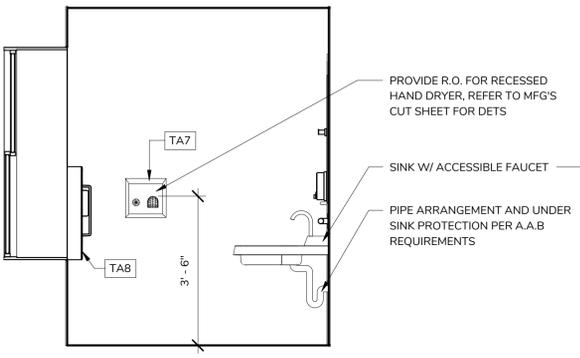
SCALE: 1/2" = 1'-0"

DRAWING NO:

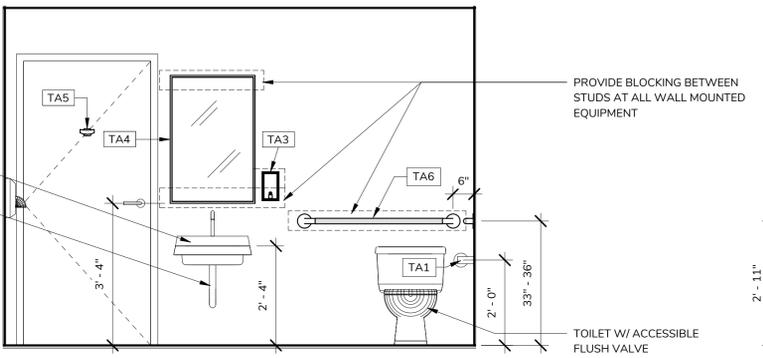
A3.1

TOILET ACCESSORY SCHEDULE	
TA-1	TOILET PAPER DISPENSER
TA-2	SURFACE MOUNTED SANITARY NAPKIN DISPOSAL
TA-3	SURFACE MOUNTED SOAP DISPENSER
TA-4	MIRROR W/ STAINLESS STEEL EDGE
TA-5	SURFACE MOUNTED COAT HOOK
TA-6	1-1/2" DIAM. X 3'-6" GRAB BARS W/ ROUGHENED TEXTURE
TA-7	RECESSED ELECTRIC HAND DRYER W/ ADA RECESSED KIT
TA-8	RECESSED MOUNTED BABY CHANGING STATION W/ ADA RECESSED KIT

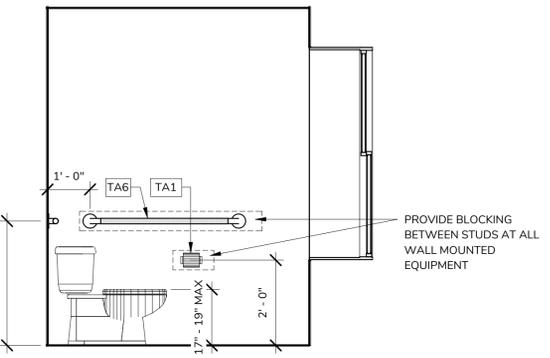
NOTE:
REFER TO SPECIFICATION SECTION FOR ALL MANUFACTURER'S AND MODEL NUMBERS OF ALL TOILET ACCESSORIES



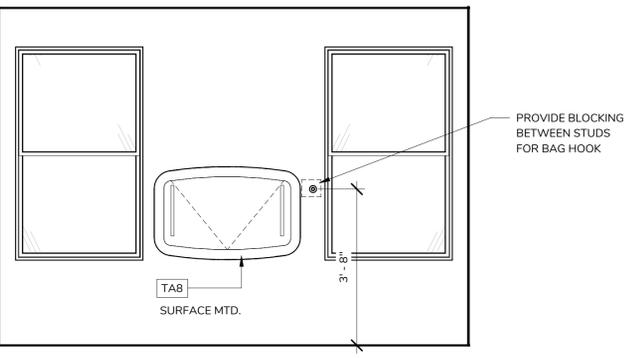
1 MEN'S ROOM ELEVATION A
1/2" = 1'-0"



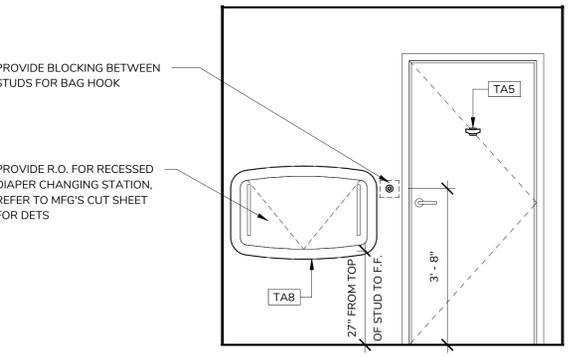
2 MEN'S ROOM ELEVATION B
1/2" = 1'-0"



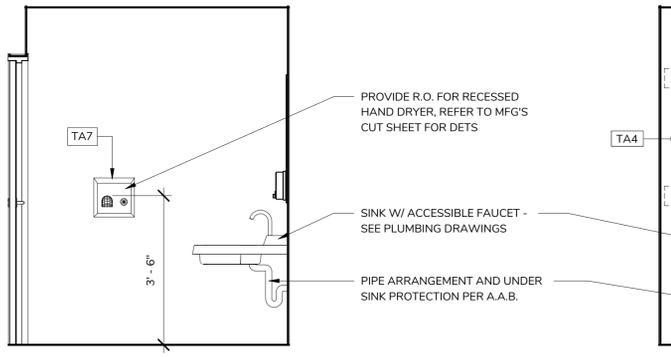
3 MEN'S ROOM ELEVATION C
1/2" = 1'-0"



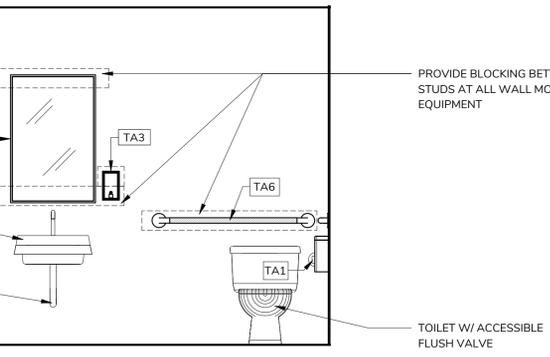
4 MEN'S ROOM ELEVATION D
1/2" = 1'-0"



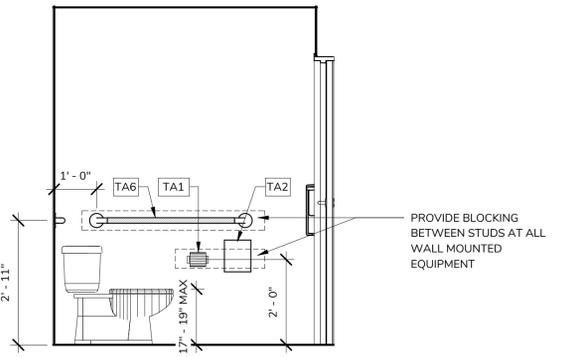
5 WOMEN'S ROOM ELEVATION A
1/2" = 1'-0"



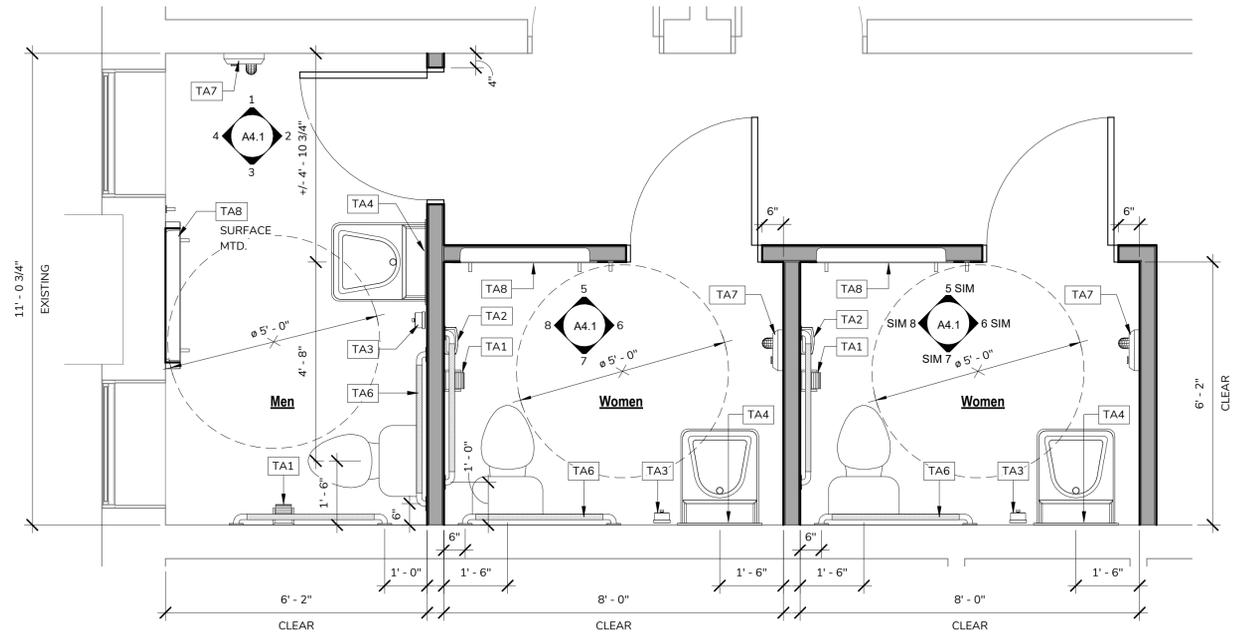
6 WOMEN'S ROOM ELEVATION B
1/2" = 1'-0"



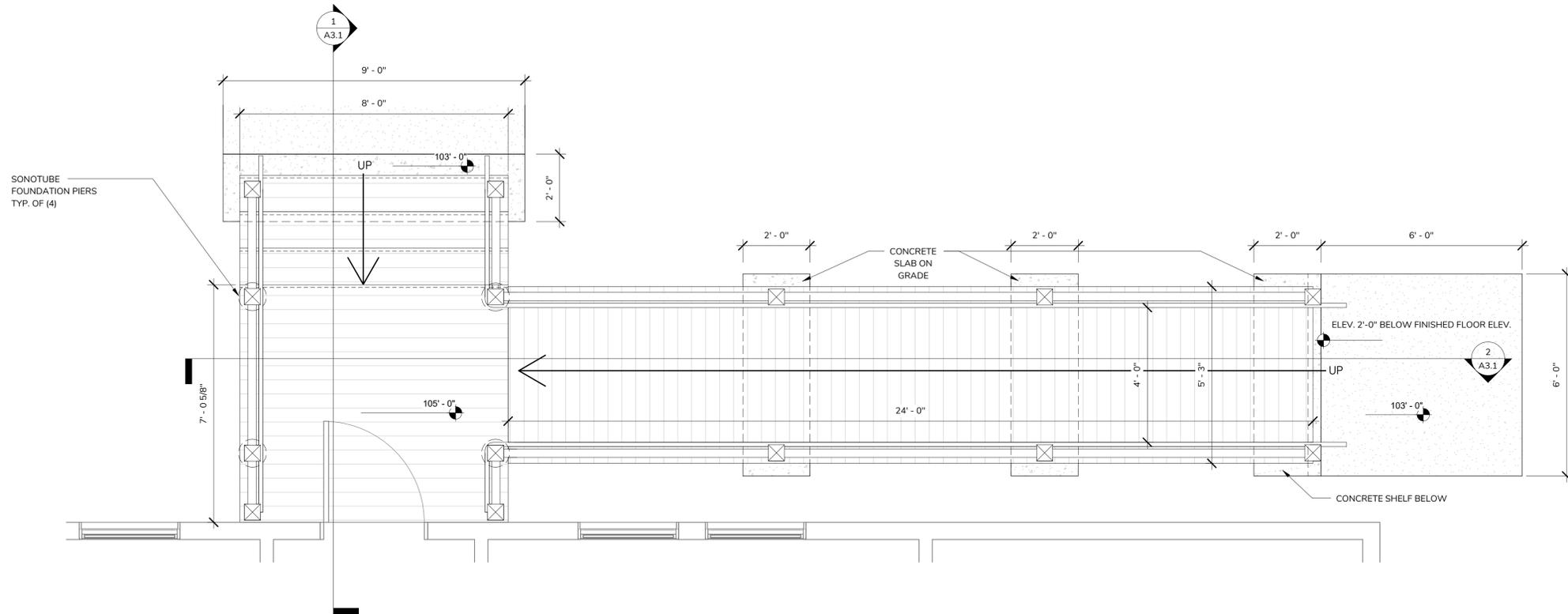
7 WOMEN'S ROOM ELEVATION C
1/2" = 1'-0"



8 WOMEN'S ROOM ELEVATION D
1/2" = 1'-0"



1 DETAIL FLOOR PLAN @ BATHROOMS
 1/2" = 1'-0"



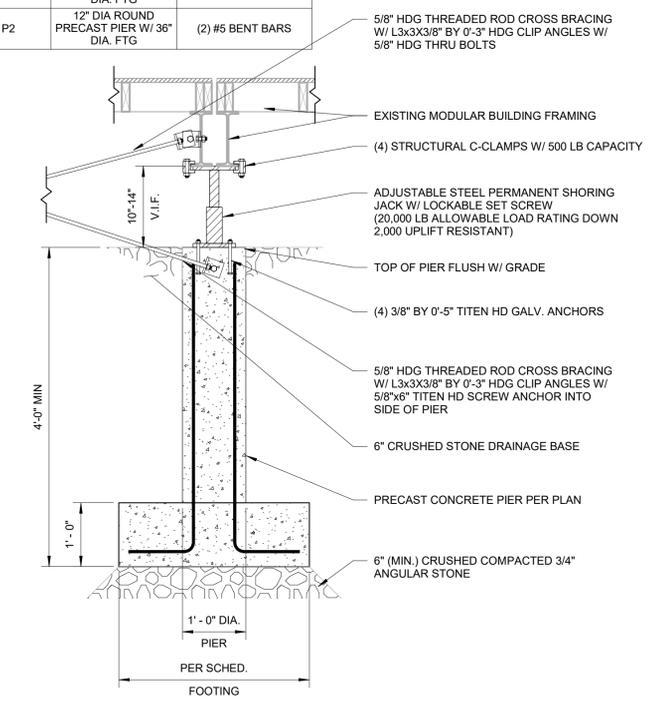
2 DETAIL PLAN AT RAMP
 1/2" = 1'-0"



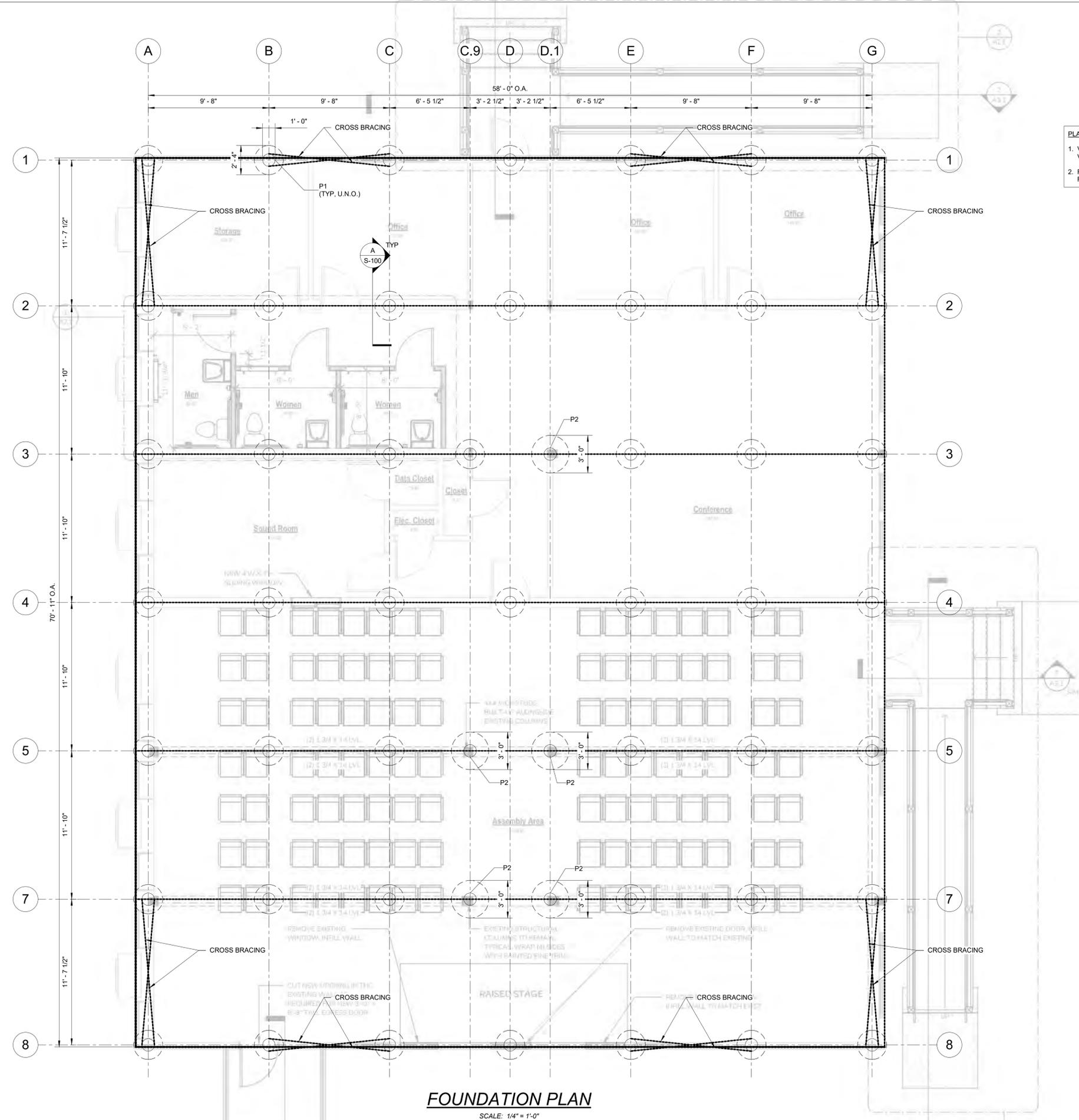
PLAN NOTES:

1. VERIFY ALL DIMENSIONS IN FIELD. EXISTING BUILDING DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
2. FINAL ENGINEERING DESIGN TO BE COORDINATED WITH PROPOSED BUILDING RECONFIGURATIONS

PIER SCHEDULE		
MARK	DESCRIPTION	REINFORCEMENT
P1	12" DIA ROUND PRECAST PIER W/ 28" DIA. FTG	(2) #5 BENT BARS
P2	12" DIA ROUND PRECAST PIER W/ 36" DIA. FTG	(2) #5 BENT BARS



TYPICAL PIER
SCALE: 3/4" = 1'-0"



FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

NO.	DATE	REVISION	BY



PROJECT: GRACE LIGHTHOUSE CHURCH
2703 CRANBERRY HIGHWAY
WAREHAM, MA

SHEET TITLE: FOUNDATION PLAN

SCALE: As indicated

DATE: 7/15/2023

DRAWN BY: NTB

CHECKED BY:

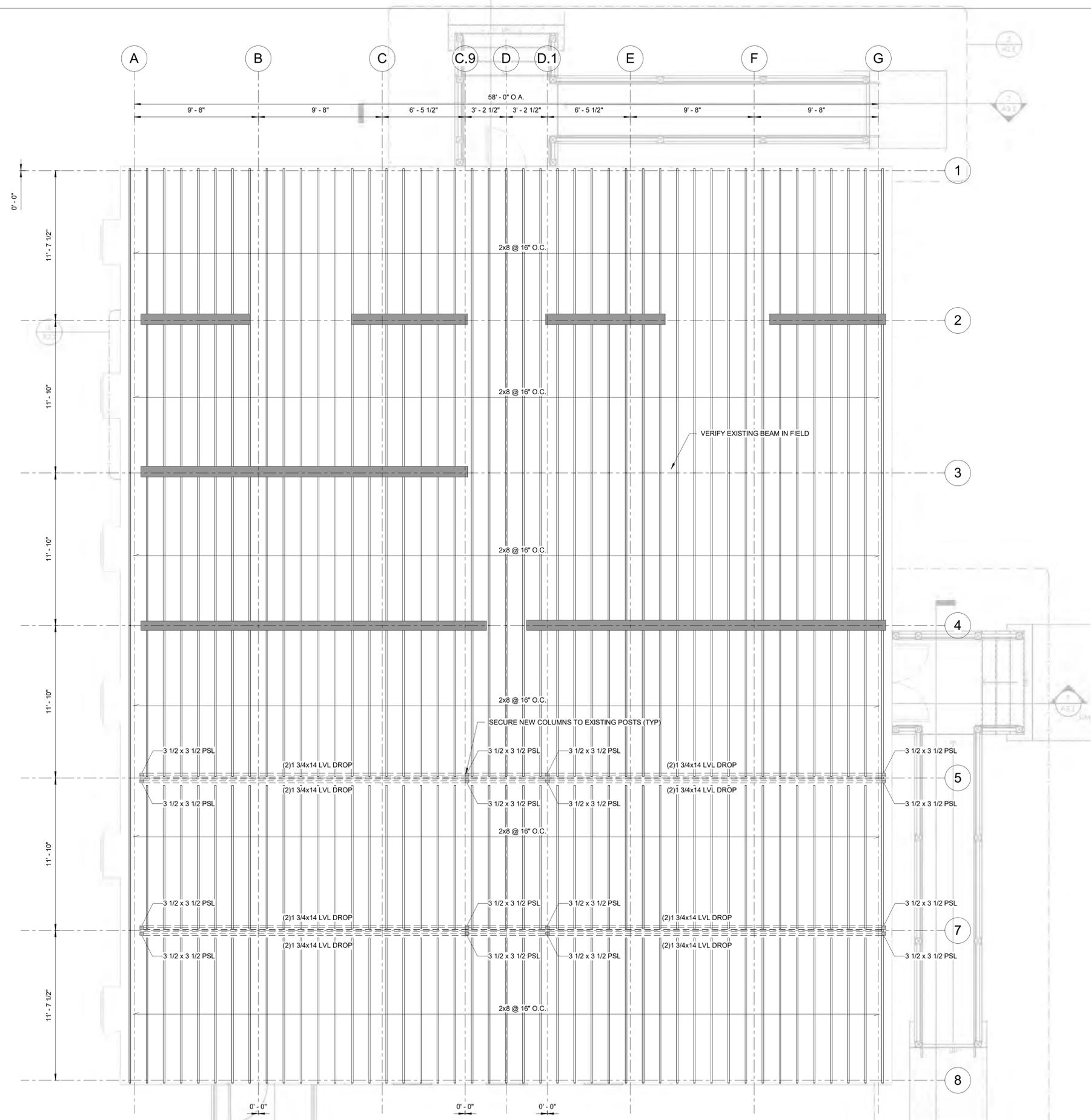
S-100

1 OF 4 SHEETS

ISSUED FOR PERMIT
"NOT FOR CONSTRUCTION"

PLAN NOTES:

1. VERIFY ALL DIMENSIONS IN FIELD. EXISTING BUILDING DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
2. FINAL ENGINEERING DESIGN TO BE COORDINATED WITH PROPOSED BUILDING RECONFIGURATIONS



ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

NO.	DATE	REVISION	BY



PROJECT	GRACE LIGHTHOUSE CHURCH
SCALE	As indicated
DRAWING FILE	
DATE	7/15/2023
DRAWN BY	NTB
CHECKED BY	
SHEET TITLE	WAREHAM, MA 2703 CRANBERRY HIGHWAY ROOF FRAMING PLAN

S-102

3 OF 4 SHEETS

PROJECT NO. C19495.00

ISSUED FOR PERMIT
"NOT FOR CONSTRUCTION"

PLANT SCHEDULE				
LABEL	SCIENTIFIC NAME	COMMON NAME	QTY	SIZE (DBH)
TREES				
AR	<i>Acer Rubrum</i> "October Glory"	"October Glory" Red Maple	3	2 - 2 1/2"
PA	<i>Platanus x acerifolia</i> "Bloodgood"	"Bloodgood" London Plane Tree	7	2 - 2 1/2"
SHRUBS				
MP	<i>Morella pensylvanica</i>	Bayberry	27	#3

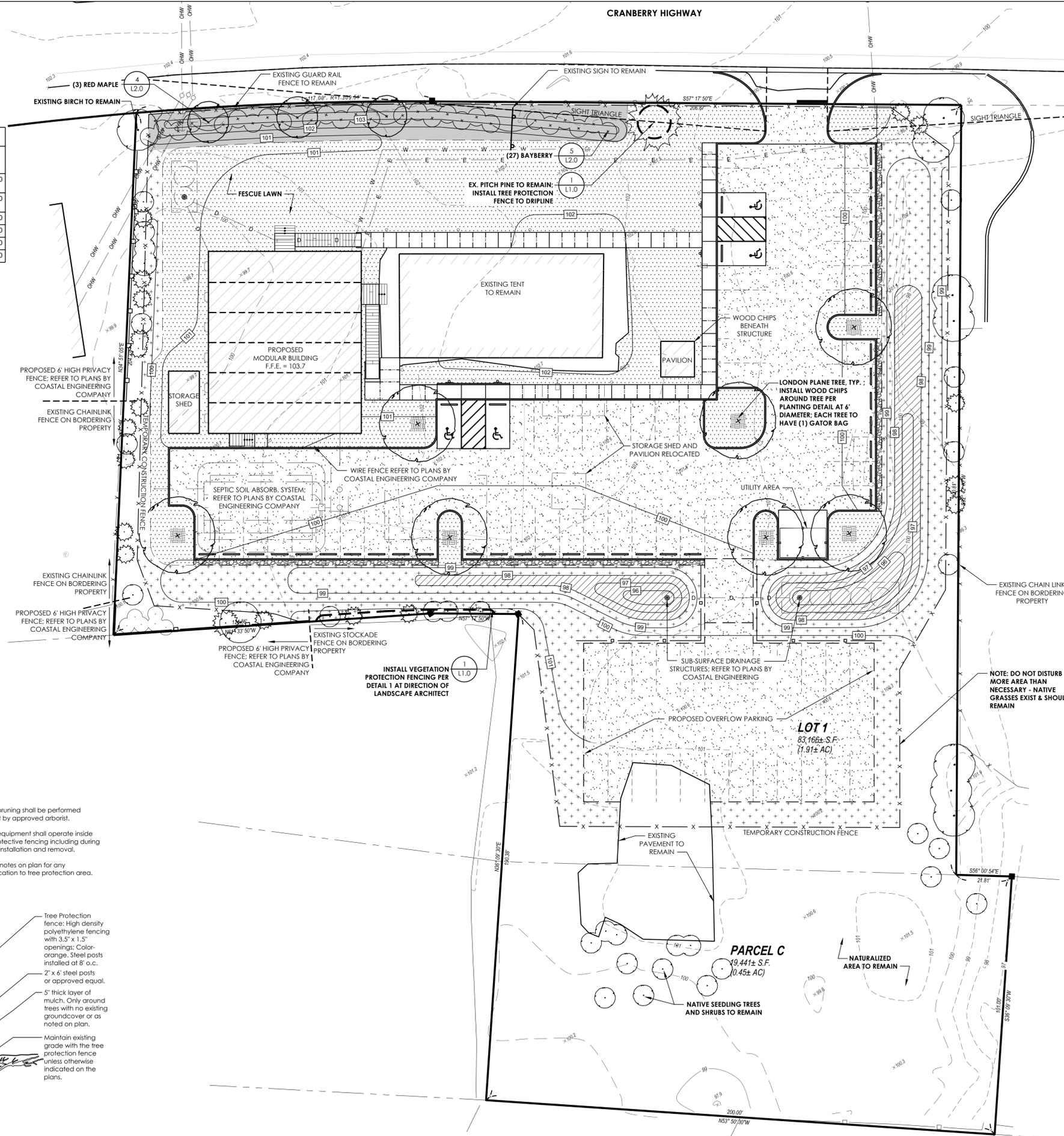
MINIMUM LANDSCAPE BUFFER (FEET) PER 1041						
ADJACENT USE HOUSE	SINGLE FAMILY HOUSE	TWO FAMILY DWELLING	MULTI-FAMILY	COMMERCIAL	OFFICE	INDUSTRIAL
SINGLE FAMILY HOUSE	NONE	NONE	10	20	20	40
TWO FAMILY DWELLING	NONE	NONE	10	20	20	40
MULTI-FAMILY	10	10	10	20	20	40
COMMERCIAL	20	20	20	10	10	10
OFFICE	20	20	20	10	10	10
INDUSTRIAL	40	40	40	10	10	10

GENERAL NOTES

- Planting contractor shall visit site prior to submitting bid to become completely familiar with site conditions.
- No planting will be installed until all grading and construction has been completed in immediate area.
- Call DIGSAFE (1-888-344-7233) to locate existing utilities prior to any excavation. Protect existing utilities to remain throughout the construction process, and repair any damage done to these at no cost to the Owner. Utilities noted on drawing are illustrative and represent approximate locations of trenching.
- Locate, protect, and maintain bench marks, monuments, control points, and project engineering reference points. Re-establish disturbed or destroyed items at Contractor's expense.
- Examine the areas and conditions under which site work is performed. Do not proceed with the work until unsatisfactory conditions are corrected. Report discrepancies in drawings or specifications to the Landscape Architect for clarifications and adjustments before commencing work. Any deviations or changes from these drawings without written acceptance of the Landscape Architect shall oblige the Landscape Architect of any and all responsibility of said deviation and change.

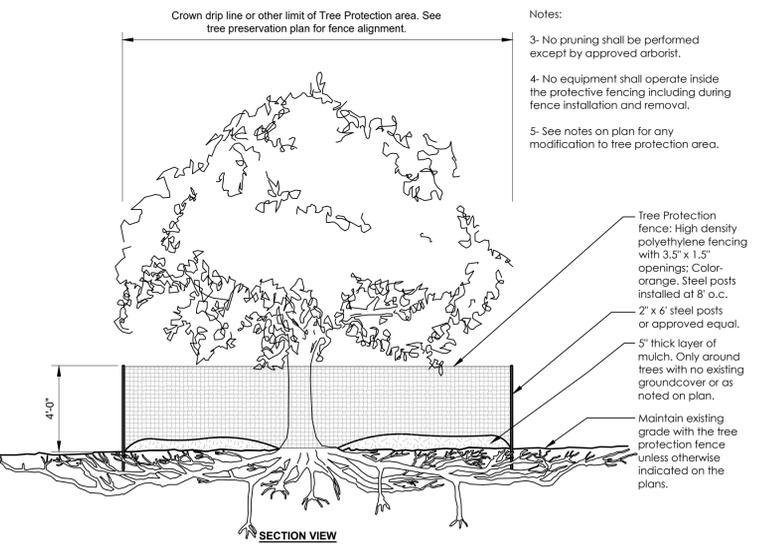
SITE PREPARATION & VEGETATION PROTECTION NOTES

- Landscape Architect to flag trees to be protected on site and confirm all vegetation protection areas prior to site work/contractor starting work.
- The tree/vegetation protection line will be established with orange construction fencing supported on steel stakes about 8' O.C. This material shall be used to protect existing trees, shrubs and other plantings as indicated on plan. Fencing is to be kept in good repair throughout the construction process. Refer to Detail 1, SHT L1.0
- Strip topsoil from construction access areas. Stockpile for reuse.



LEGEND

- Fescue Lawn - 15,500 SF +/-
- Little Bluestem Seed Mix - 3,000 SF +/-
- Short Prairie for Dry Soils by prairienursery.com - 12,000 SF +/-
- Tall Prairie for Dry Soils by prairienursery.com - 3,100 SF +/-
- Wood Chips
- Existing Native Seedling Trees, Shrubs, & Grasses to Remain



1 TREE & EXISTING VEGETATION PROTECTION
1/4" = 1'-0"

CLM CRAWFORD LAND MANAGEMENT

JENICK STUDIO

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catalystarchitects.com

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GRACE LIGHTHOUSE CHURCH
2703 CRANBERRY HIGHWAY
WAREHAM, MA 02571

LANDSCAPE PLAN

SCALE: 1" = 20'
DATE: 1/30/2024

L1.0

PLANTING & SEEDING NOTES

- Contractor to inspect all planting & seeding areas after construction is completed in those areas PRIOR to commencing any planting or seeding installation. A soil compaction meter shall be used to test ALL planting and seeding areas to ensure SUB-SOIL and TOP SOIL conditions are NOT compacted by construction activities BEFORE planting or seeding. If compacted areas are encountered, contractor shall commence with de-compaction of soils utilizing the appropriate method according to DETAILS 1, 2, & 3, SHEET L2.0
- Promptly notify the Landscape Architect of unexpected sub-surface conditions.
- Provide samples of materials proposed for use for the review of the Landscape Architect, including fill, topsoil, planting soil, and amendments. Suitable excavated materials removed to accommodate new construction may be used as fill material subject to the approval of the Landscape Architect or Civil Engineer. Soil test reports for topsoil shall be provided by the contractor through the University of Massachusetts soil testing laboratory.
- All disturbed areas not to be paved or planted shall be loamed and seeded as shown. See plant schedule for seed mixes.
- Topsoil to be installed shall be natural, friable, fertile soil characteristic of productive soil in the vicinity, reasonably free of stones, clay lumps, roots, and other foreign matter. Do not use muddy topsoil. Place during dry weather. Allow for 6" average depth of topsoil screened for lawn areas, and 12" depth at planting areas, except as otherwise indicated on the drawings. Contractor may use stockpiled topsoil from the site for any buffer areas. Do not use for lawn areas.

- 6. Seeding instructions for:**
- Short Prairie for Dry Soils
 - Tall Prairie for Dry Soils
 - Little Bluestem - 1 PLS lb/1000 sf
 - Cover Crop & Nurse Crop (seed oats)

FALL SEEDING:

Mid-August - September:

- Seed mix - 15lbs/ac * bluestem area is seeded at different rate, refer to above
- Cover crop - 125lbs/acre
- Prepare seed bed by hand raking soils to 'fluff' them, if needed, depending on how soils were prepared by the Site Contractor.
- Mix seed mix AND cover crop together with moistened (not wet) peat moss. Use 2.5 cubic feet of peat moss per 1,000 square feet of area to be seeded.
- Divide the mixture in half and hand broadcast one half of the seed evenly over the area.
- Hand broadcast the second half of the seed walking perpendicular to the first direction to ensure an even seed distribution.
- Lightly rake or drag seeded area.
- Roll seeded area with drum roller.
- Cover all swale and basin areas as well as the berm with 18-month biodegradable erosion control blankets & stake in place with 12" hardwood stakes.

- Lightly rake or drag seeded area.
- Roll seeded area with drum roller.
- Cover all swale and basin areas as well as the berm with 18-month biodegradable erosion control blankets & stake in place with 12" hardwood stakes.

October - April:

- Seed mix - 15lbs/ac * bluestem area is seeded at different rate, refer to above
- Prepare seed bed by hand raking soils to 'fluff' them, if needed, depending on how soils were prepared by the Site Contractor.
- Mix seed mix with moistened (not wet) peat moss. Use 2.5 cubic feet of peat moss per 1,000 square feet of area to be seeded.
- Divide the mixture in half and hand broadcast one half of the seed evenly over the area.
- Hand broadcast the second half of the seed walking perpendicular to the first direction to ensure an even seed distribution.
- Lightly rake or drag seeded area.
- Roll seeded area with drum roller.
- Cover all swale and basin areas as well as the berm with 18-month biodegradable erosion control blankets & stake in place with 12" hardwood stakes.
- Cover all other seeded areas with 1/2" of clean, weed-free chopped straw.

May - June (can be used July - August but not recommended):

- Seed mix - 20lbs/ac * bluestem area is seeded at different rate, refer to above
- Nurse crop - 50lbs/acre
- Prepare seed bed by hand raking soils to 'fluff' them, if needed, depending on how soils were prepared by the Site Contractor.
- Mix seed mix AND cover crop together with moistened (not wet) peat moss. Use 2.5 cubic feet of peat moss per 1,000 square feet of area to be seeded.

- Divide the mixture in half and hand broadcast one half of the seed evenly over the area.
- Hand broadcast the second half of the seed walking perpendicular to the first direction to ensure an even seed distribution.
- Lightly rake or drag seeded area.
- Roll seeded area with drum roller.
- Cover all swale and basin areas as well as the berm with 18-month biodegradable erosion control blankets & stake in place with 12" hardwood stakes.

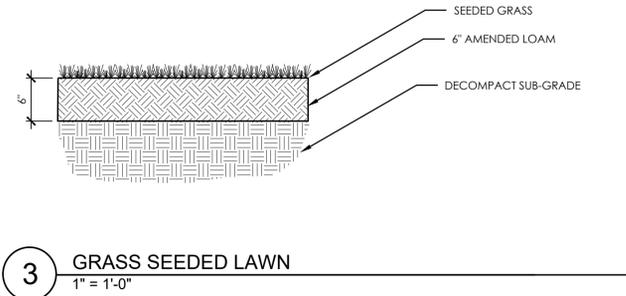
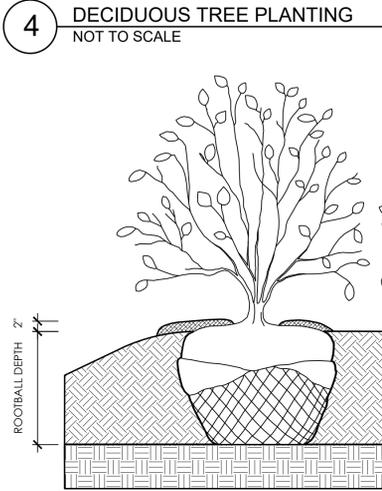
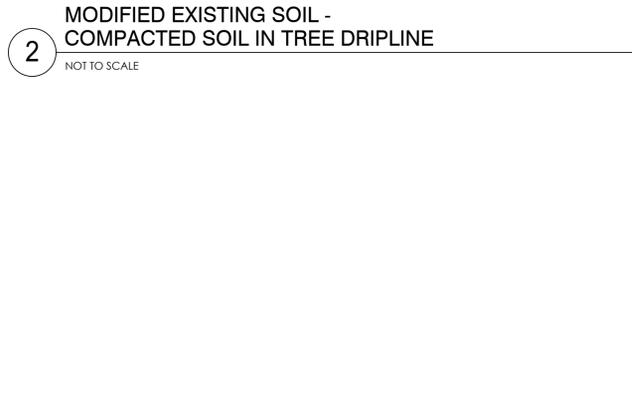
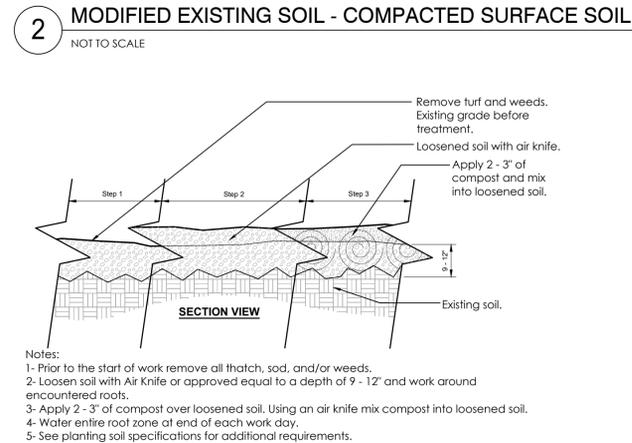
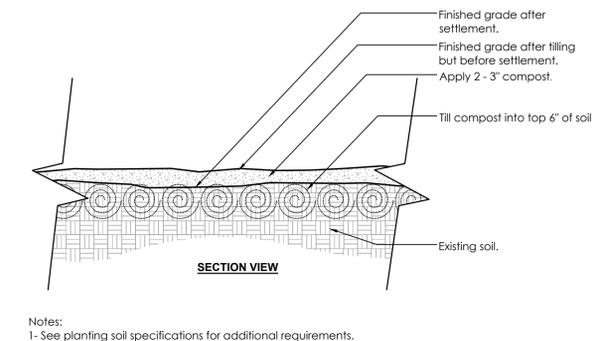
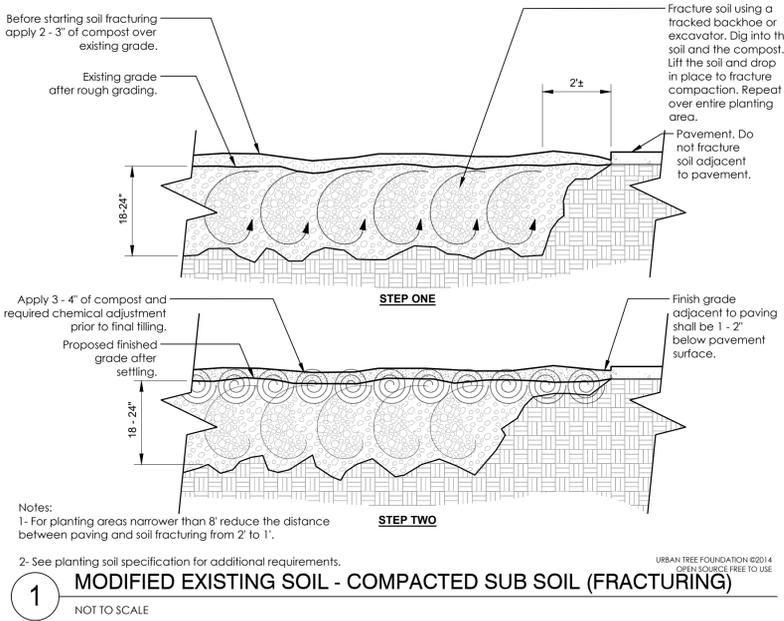
- If there is a discrepancy between the number of plants shown on the plan and the number of plants shown in plant list, the number of plants shown on plan will take precedence.
- All container material to be grown in container a minimum of 6 months.
- All material shall comply with the latest edition of the American Standard for Nursery Stock, American Association of Nurserymen.
- Contractor shall repair all damage to property from planting operations at no cost to the owner.
- Contractor shall guarantee new plant material through one calendar year from time of provisional acceptance, provided any irrigation or maintenance requirements required by contractor are met.
- The Landscape Architect may tag all plants at the nursery and inspect them after delivery to the site. All plant materials shall be inspected by the Landscape Architect on site prior to installation. Landscape Architect can reject any plant that does not meet specifications.
- All proposed plants shall be located carefully as shown on the plans and the placements shall be approved by Landscape Architect before the plants are installed.
- Spacing of plants is to be based on measurements taken parallel to the ground plane.
- Staking and guying shall be determined by the Landscape Architect on a tree by tree basis. For pricing purposes, provide a per tree unit cost for staking and guying. If staking and guying is required, remove tree wrap, stakes, and guy wires at end of first growing season.

LANDSCAPE BUFFER MAINTENANCE NOTES

- New trees to be watered using Treegator Original Slow Release Watering Bag filled with 15 gallons of water twice per week, or equal. For 3 growing seasons minimum. New shrubs to be watered using Tree Watering Donut 15 Gallon Capacity By Dew Right filled with 15 gallons of water twice per week, or equal. Watering can be periodic during May & June for hot stretches of weather. Watering to be regular July - Mid September.
- Seedling/Sapling trees that have been previously mown or cut will be assessed by a licensed ISA arborist. Multi-stem specimens will be pruned to retain the most robust 1-3 leaders, depending on the structure of the specimen.
- Native shrubs or trees existing in the retained buffer areas may be pruned for health or regeneratively pruned if deemed necessary or beneficial.
- Any state-listed invasive species or weedy/aggressive species will be either mechanically removed or treated with a species-appropriate herbicide by a state-licensed and insured applicator.

SEEDED BUFFERS & NATURALIZED AREAS MAINTENANCE

- FIRST GROWING SEASON**
 - Monitor seeded areas weekly. When germinating weeds reach a height of 10-12" or begin to set flower, mow areas to a height of 6"-8". A string trimmer may be used for smaller areas; a flail mower with an appropriate height setting for larger areas.
 - If weed germination is minimized, they may be hand pulled or spot treated with an appropriate herbicide before flowering.
 - DO NOT MOW after September 15th
 - Leave areas between 8"-10" high through the first winter.
 - EXPECT TO MOW 3 TIMES DURING THE FIRST GROWING SEASON.
- SECOND GROWING SEASON**
 - In April, mow all areas to a 2' height and rake off cuttings for disposal off site.
 - If annual weed germination is still plentiful, mow to 10"-12" in height in mid to late June to prevent flower and seed production.
 - If weed germination is minimal, hand weed or spot treat as appropriate.
 - A second mowing may be required depending on weed species and content.
- THIRD GROWING SEASON**
 - Mow meadows and naturalized areas once per year in April to a height of 2". DO NOT MOW LOWER OR AT ANY OTHER TIME OF YEAR.



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PLANTING DETAILS

SCALE: NOT TO SCALE
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