NOTICE OF INTENT SUBMISSION: JUNE 30, 2022

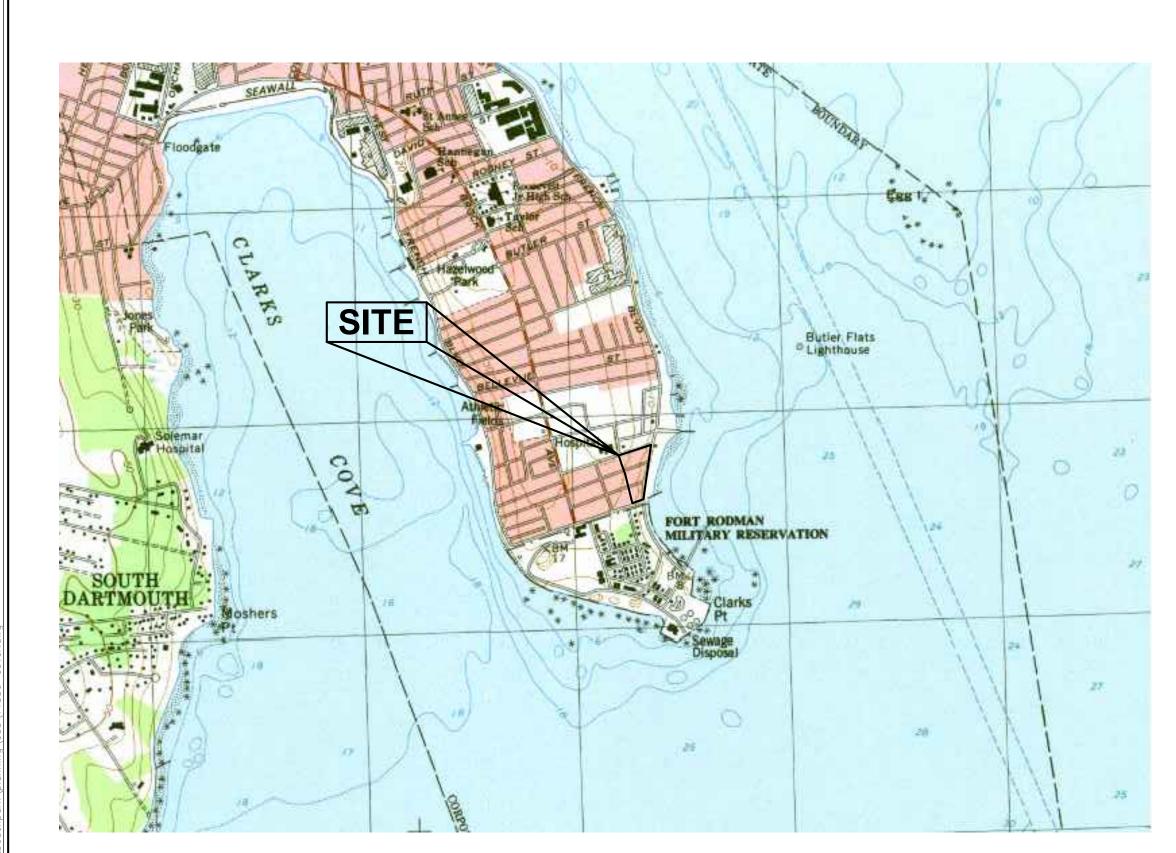
EAST BEACH PARK PARKING LOT GREEN INFRASTRUCTURE RETROFIT

NEW BEDFORD, MA

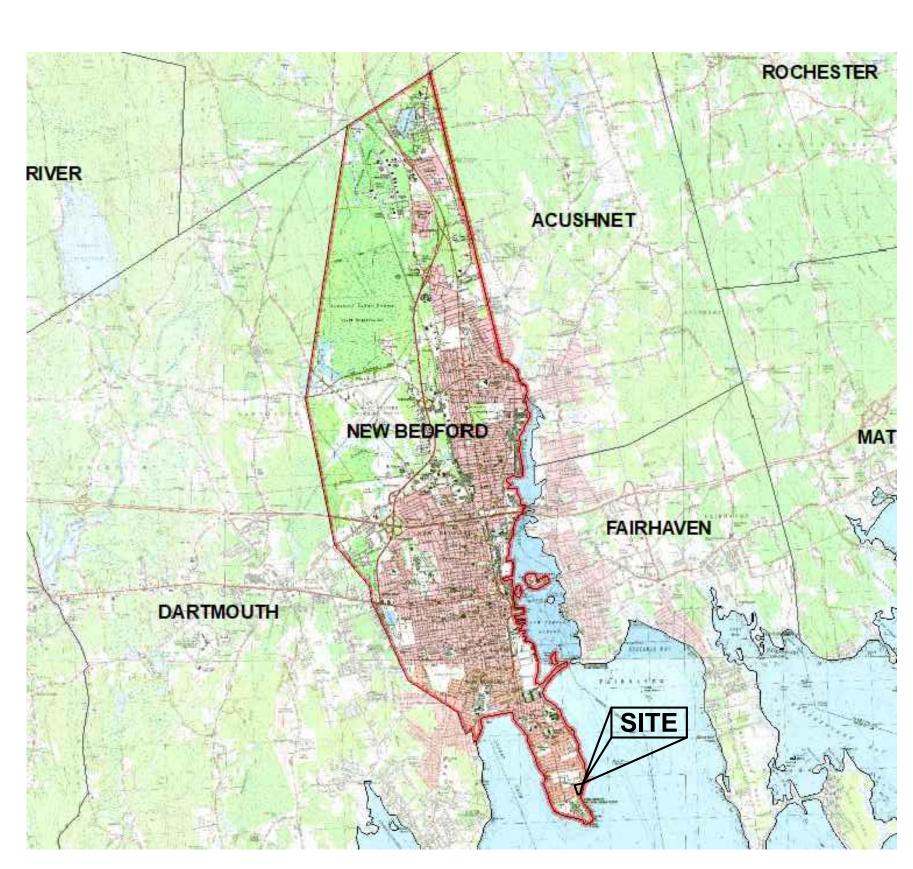








LOCUS MAP - NOT TO SCALE



NEW BEDFORD MA GIS LOCUS MAP

LIST OF DRAWINGS

COVER SHEET

EXISTING CONDITIONS NOTES AND LEGEND - 1 OF 3

EXISTING CONDITIONS PLAN - 2 OF 3 EXISTING CONDITIONS PLAN - 3 OF 3

CIVIL NOTES, ABBREVIATIONS, & LEGENDS

SITE DEMOLITION PLAN

SITE EROSION & SEDIMENT CONTROL PLAN

SITE PHASING PLAN

SITE LAYOUT PLAN - OVERALL

SITE LAYOUT PLAN - SOUTH LOT

SITE LAYOUT PLAN - MIDDLE LOT

SITE LAYOUT PLAN - NORTH LOT

SITE GRADING PLAN - SOUTH LOT

SITE GRADING PLAN - MIDDLE LOT

SITE GRADING PLAN - NORTH LOT SITE DRAINAGE PLAN - OVERALL

SITE DRAINAGE PLAN - SOUTH LOT

SITE DRAINAGE PLAN - MIDDLE LOT

SITE DRAINAGE PLAN - NORTH LOT

EROSION & SEDIMENT CONTROL DETAILS

CIVIL DETAILS

SITE DETAILS SHEET II

SITE LAYOUT DETAILS

PLANTING PLAN

CONSULTANTS

CIVIL ENGINEER

NITSCH ENGINEERING 2 CENTER PLAZA, SUITE 430 BOSTON, MA 02108 PHONE: (617) 338-0063

CLIENT / OWNER

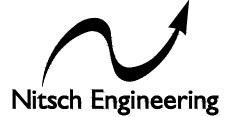
CITY OF NEW BEDFORD 181 HILLMAN STREET #3 NEW BEDFORD, MA 02740 PHONE: (508) 979-1400

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COST ESTIMATIOR

PM&C COST ESTIMATION, PROJECT MANAGEMENT & CONSTRUCTION MONITORING 20 DOWNER AVENUE STE 5 HINGHAM, MA 02043 PHONE: (781) 740-8007



2 Center Plaza, Suite 430 Boston, MA 02108 T: (617) 338-0063

NITSCH PROJECT #14850

CITY OF NEW BEDFORD

81 HILLMAN STREET #3, NEW BEDFORD, MA 02

NITSCH PROJECT # 14850 14850-CLO.DWG 06/30/2022 DATE: PROJECT MANAGER: BFC DRAFTED BY CHECKED BY:

DEP FILE #049-0893

RODNEY FRENCH BOULVARD (EAST)

CITY OF NEW BEDFORD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		1	3
	PROJECT FILE NO.	14850	

TITLE SHEET, LEGEND & **ABBREVIATIONS**

NOTES

1. THIS DOCUMENT IS AN INSTRUMENT OF SERVICE OF NITSCH ENGINEERING. IT IS ISSUED TO THE CITY OF NEW BEDFORD, PARKS RECREATION & BEACHES FOR PURPOSES RELATED DIRECTLY AND SOLELY TO NITSCH ENGINEERING'S SCOPE OF SERVICES UNDER CONTRACT WITH CITY OF NEW BEDFORD, PARKS RECREATION & BEACHES FOR EAST BEACH PARKING LOT REDESIGN PROJECT. ANY USE OR REUSE OF THIS DOCUMENT FOR ANY REASON BY ANY PARTY FOR PURPOSES UNRELATED DIRECTLY AND SOLELY TO SAID CONTRACT AND PROJECT SHALL BE AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY, INCLUDING LIABILITY FOR VIOLATION OF COPYRIGHT LAWS, UNLESS WRITTEN AUTHORIZATION IS GIVEN THEREFOR BY NITSCH ENGINEERING.

- 2. THE PURPOSE OF THIS PLAN IS TO SHOW TOPOGRAPHIC SURVEY AS THE RESULT OF AN ON-THE-GROUND INSTRUMENT SURVEY WHICH OCCURRED DECEMBER 29, 2021.
- 3. HORIZONTAL COORDINATES REFER TO MASSACHUSETTS STATE PLANE COORDINATE (NAD83), MAINLAND ZONE, U.S. SURVEY FEET BASED ON GPS RTK OBSERVATIONS.
- 4. ELEVATION REFERS TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) BASED ON GPS RTK OBSERVATIONS.
- 5. THE PARCELS SHOWN HEREON LIE WITHIN A ZONE AE (ELEVATION 17) AND VE (ELEVATIONS 18 & 19), SPECIAL FLOOD HAZARD AREA SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD, BASE FLOOD ELEVATIONS DETERMINED; AS GRAPHICALLY SHOWN ON FEMA FLOOD INSURANCE RATE MAP NUMBER 25005C0482G, MAP REVISED DATE: JULY 16, 2014 FOR THE COUNTY OF BRISTOL, MASSACHUSETTS.
- 6. THE INFORMATION CONTAINED ON THE DISK OR ELECTRONIC DRAWING FILE ACCOMPANYING THIS PLAN MUST BE COMPARED TO THE SEALED AND SIGNED HARD COPY OF THE PLAN TO ENSURE THE ACCURACY OF ALL INFORMATION AND TO ENSURE NO CHANGES, ALTERATIONS, OR MODIFICATIONS HAVE BEEN MADE. RELIANCE SHALL NOT BE MADE ON A DOCUMENT TRANSMITTED BY COMPUTER OR OTHER ELECTRONIC MEANS UNLESS FIRST COMPARED TO THE ORIGINAL SEALED DOCUMENT ISSUED AT THE TIME OF THE SURVEY. DUE TO THE CRITICAL NATURE OF SURVEYING, DATA ACQUISITION, AND AUTOCAD PLAN DEVELOPMENT, IF CRITICAL DIMENSIONAL INFORMATION IS NEEDED AND IS NOT SPECIFICALLY SHOWN ON THE ELECTRONIC DRAWING FILE, PLEASE CONTACT NITSCH ENGINEERING.

ABBREVIATIONS

AUX	AUXILARY	GMH	GAS MANHOLE
BD	BOUND	GRAN	GRANITE
BIT	BITUMINOUS	GRAV	GRAVEL
ВĘ	BASELINE	GRD	GUARD
BLDG	BUILDING	GRL	GUARDRAIL
BLDG	BENCHMARK	HDW	HEADWALL
		HYD	HYDRANT
BR	BRIDGE	INV	INVERT
BRK	BRICK	IP	IRON PIPE
BWL	BROKEN WHITE LINE	JB	JERSEY BARRIER
BYL	BROKEN YELLOW LINE	L	LENGTH OF CURVE
CAB	CABINET	LB	LEACHING BASIN
СВ	CATCH BASIN	LC	LAND COURT
CC	CEMENT CONCRETE	LCB	LAND COURT BOUND
CCB	CAPE COD BERM	LCD	LAND COURT DISK
CEN	CENTER	LO	LAYOUT
CI	CURB INLET	LP	LIGHT POLE
CIP	CAST IRON PIPE	LPD	LIGHT POLE DOUBLE LIGHT
ą_	CENTER LINE	LSA	LANDSCAPED AREA
CLF	CHAIN LINK FENCE	MAG	MAG NAIL
CMH	CABLE MANHOLE	MBE	MIDDLE BACK EDGE
CMP	CORRUGATED METAL PIPE	MED	MEDIAN
CO	COUNTY	MH	MANHOLE
CO BD	COUNTY BOUND	MP	MILE POST
CON	CONIFEROUS		
CONC	CONCRETE	MTL	METAL
CPP	CORRUGATED PLASTIC PIPE	N/F	NOW OR FORMERLY
CSP	CORRUGATED FEACHOTH E	NB	NORTHBOUND
CULV	CULVERT	OH	OVERHANG
CULV	CROSSWALK	OHW	OVERHEAD WIRE
	DOUBLE WHITE LINE	PC	POINT OF CURVATURE
DBWL	DOUBLE YELLOW LINE	PCC	POINT OF COMPOUND CURVATURE
DBYL		PED	PEDESTRIAN
DEC	DECIDUOUS	PI	POINT OF INTERSECTION
DH	DRILL HOLE	PK	PK NAIL
DI	DROP INLET	የ	PROPERTY LINE
DIA	DIAMETER	PP	PRICK PUNCH
DIP	DUCTILE IRON PIPE	PRC	POINT OF REVERSE CURVATURE
DMH	DRAIN MANHOLE	PT	POINT OF TANGENCY
DSK	DISK	PVC	POLYVINYL CHLORIDE PIPE
DWL	DOTTED WHITE LINE	PVMT	PAVEMENT
DYL	DOTTED YELLOW LINE	PWW	PAVED WATERWAY
EB	EASTBOUND	PZ	PIEZOMETER
EL	ELEVATION	R	RADIUS OF CURVATURE
EMH	ELECTRIC MANHOLE	RB	REBAR
EP	EDGE OF PAVEMENT	RC	REINFORCED CONCRETE
EPLP	ESCUTCHEON PIN IN LEAD PLUG	RCP	REINFORCED CONCRETE PIPE
ETW	EDGE OF TRAVELED WAY	RET	RETAINING
EX	EXISTING	ROW	RIGHT OF WAY
FF	FINISH FLOOR	RR	RAILROAD
FGS	FLAGSTONE	RRS	RAILROAD SPIKE
FL	FLOWLINE	S BD	SOUTHBOUND
FLDSTN	FIELDSTONE		
GAR	GARAGE	SB	STONE BOUND
OD.	CDOLIND	SD	SUBDRAIN

GD

GROUND

GALVANIZED IRON PIPE

SGE SLOPED GRANITE EDGING

SHLD	SHOULDER
SHLO	STATE HIGHWAY LAYOUT
SK	SKEW
SL	STOP LINE
SMH	SEWER MANHOLE
SPK	SPIKE
STA	STATION
STN	STONE
SW	SIDEWALK
SWL	SOLID WHITE LINE
SYL	SOLID YELLOW LINE
Т	TANGENT DISTANCE
TAN	TANGENT
TEMP	TEMPORARY
TMH	TELEPHONE MANHOLE
TR	TOP OF RAIL
TSC	TRAFFIC SIGNAL CONDUIT
TYP	TYPICAL
VAR	VARIABLE
VCP	VITRIFIED CLAY PIPE
VGC	VERTICAL GRANITE CURB
VLT	VAULT
WB	WESTBOUND
WCR	WHEELCHAIR RAMP
WD	WOOD
WID	WROUGHT IRON PIPE
WIP	TOP OF WALL

DULDER	● BF#	BANK FLAG
TE HIGHWAY LAYOUT	- "	BORE HOLE
EW	0	BUSH
OP LINE	⊕ BM #	BENCHMARK
VER MANHOLE		BOUND (CONC, STONE, LAND COURT, ETC.)
KE	©	CABLE MANHOLE
TION	■ CB	CATCH BASIN - SQUARE
DNE	⊞ CB	
EWALK		CATCH BASIN - D-FRAME
ID WHITE LINE	⊕ CB	CATCH BASIN - ROUND
LID YELLOW LINE	● DSK	DISK (CA/T, USC&GS, LAND COURT, ETC.)
IGENT DISTANCE	● DH	DRILL HOLE
IGENT	(D)	DRAIN MANHOLE
MPORARY	□ EHH	ELECTRIC HANDHOLE
EPHONE MANHOLE	E)	ELECTRIC MANHOLE
OF RAIL	o EM	ELECTRIC METER
AFFIC SIGNAL CONDUIT	● EPLP	ESCUTCHEON PIN IN LEAD PLUG
PICAL	⊠ FB	FLASHING BEACON
RIABLE	Δ FES	FLARED END SECTION
RIFIED CLAY PIPE	⊕ FP	FLAG POLE
RTICAL GRANITE CURB	• GF	GAS FILL
JLT	• GG	GAS GATE
STBOUND	⊡ GM	GAS METER
EELCHAIR RAMP	G GP	GAS PUMP
OD	(G)	GAS MANHOLE
OUGHT IRON PIPE	O— GPL	GUY POLE
P OF WALL	E	HANDICAP SYMBOL
· · · · · · · · · · · · · · · · · · ·	\leftarrow	GUY WIRE ANCHOR
	O HTP	HIGH TENSION POWER POLE
	\Diamond	FIRE HYDRANT
	O IP	IRON PIPE
	\	LIGHT POLE
	<u> </u>	LIGHT POLE DOUBLE LIGHT

<u>LEGEND</u>					
MAG	MAG NAIL				
□ MB	MAIL BOX				
■ MHB	MASSACHUSETTS HIGHWAY BOUND				
↔ MW	MONITORING WELL				
O OIL	OIL FILL				
M	OTHER MANHOLE				
□ PB	PULL BOX				
- ∳ - PED	PEDESTRIAN SIGNAL				
Δ	PHOTO CONTROL - H & V				
0	PHOTO CONTROL - V ONLY				
O PK	PK NAIL				
O PM	PARKING METER				
O POST	CIRCULAR POST				
□ POST	SQUARE POST				
O RB	REBAR/IRON PIN				
O RRS	RAILROAD SPIKE				
⊠ RRSG	RAILROAD SIGNAL				
⊠ RRSW	RAILROAD SWITCH				
☑ SN	STAKE AND NAIL				
O SP	STAND PIPE				
(S)	SEWER MANHOLE				
(ST) (C)	STEAM MANHOLE				
■ TB	STUMP TOWN LINE BOUND (CORNER)				
■ TB TCB	TRAFFIC SIGNAL CONTROL CABINET				
(T)	TELEPHONE MANHOLE				
▼ TFMR	TRANSFORMER				
☐ TLRS	TOWN LINE ROAD STONE				
TPIT #	TEST PIT				
O TPL	TROLLEY POLE				
A	TRAVERSE POINT				
● 22"M	TREE				

-∳- TS	TRAFFIC SIGNAL
o TS	TRAFFIC SIGNAL MAST ARM/SPAN WIRE PO
	SIGN
$\overline{\circ}$	SIGN - DOUBLE POST
b UFB#	UTILITY POLE W/ FIRE PULL BOX
ULT#	UTILITY POLE W/ LIGHT
Ó-UPDL#	UTILITY POLE W/ DOUBLE LIGHT
- 	UTILITY POLE
O VP	VENT PIPE
W	WATER MANHOLE
• WG	WATER GATE
o wm	WATER METER
• WSO	WATER SHUTOFF
⊕ WELL	WELL (POTABLE)
• WF#	WETLAND FLAG
X X-CUT	X-CUT

PARS. NO:

FIELD CHIEF: CC

DATE:

01/27/2022

PLAN REFERENCES

3. HUDSON STREET CITY LAYOUT #4285

4. PORTLAND STREET CITY LAYOUT #4286

1. PLAN BOOK 44 PAGE 82

2. PLAN BOOK 178 PAGE 1

UTILITY INFORMATION STATEMENT

- 1. THE SUB-SURFACE UTILITY INFORMATION SHOWN HEREON IS COMPILED BASED ON FIELD SURVEY INFORMATION, RECORD INFORMATION AS SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES, AND PLAN INFORMATION SUPPLIED BY THE CLIENT, IF ANY; THEREFORE WE CANNOT GUARANTEE THE ACCURACY OF SAID COMPILED SUB-SURFACE INFORMATION TO ANY CERTAIN DEGREE OF STATED TOLERANCE. ONLY PHYSICALLY LOCATED SUB-SURFACE UTILITY FEATURES FALL WITHIN NORMAL STANDARD OF CARE ACCURACIES.
- 2. THE LOCATIONS OF UNDERGROUND PIPES, CONDUITS, AND STRUCTURES HAVE BEEN DETERMINED FROM SAID INFORMATION, AND ARE APPROXIMATE ONLY. COMPILED LOCATIONS OF ANY UNDERGROUND STRUCTURES, NOT VISIBLY OBSERVED AND LOCATED, CAN VARY FROM THEIR ACTUAL LOCATIONS.
- 3. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED.
- 4. THE STATUS OF UTILITIES, WHETHER ACTIVE, ABANDONED, OR REMOVED, IS AN UNKNOWN CONDITION AS FAR AS OUR COMPILATION OF THIS INFORMATION.
- 5. IT IS INCUMBENT UPON INDIVIDUALS USING THIS INFORMATION TO UNDERSTAND THAT COMPILING UTILITY INFORMATION IS NOT EXACT, AND IS SUBJECT TO CHANGE BASED UPON VARYING PLAN INFORMATION RECEIVED AND ACTUAL LOCATIONS.
- 6. THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES IS SUBJECT TO FIELD CONDITIONS, THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS AND OTHER MATTERS.
- 7. THE PROPER UTILITY ENGINEERING/COMPANY SHOULD BE CONSULTED AND THE ACTUAL LOCATIONS OF SUBSURFACE STRUCTURES SHOULD BE VERIFIED IN THE FIELD (V.I.F.) BEFORE PLANNING FUTURE CONNECTIONS. CONTACT THE DIG SAFE CALL CENTER AT 1-888-344-7233, SEVENTY-TWO HOURS PRIOR TO EXCAVATION, BLASTING, GRADING, AND/OR PAVING.
- 8. AS OF THE DATE OF THIS PLAN RECORD INFORMATION HAS NOT BEEN RECEIVED BY NITSCH ENGINEERING FOR THE FOLLOWING UTILITIES:ENBRIDGE



DENIS R. SEGUIN, PLS MASSACHUSETTS REG. No. 37058 REGISTERED PROFESSIONAL LAND SURVEYOR

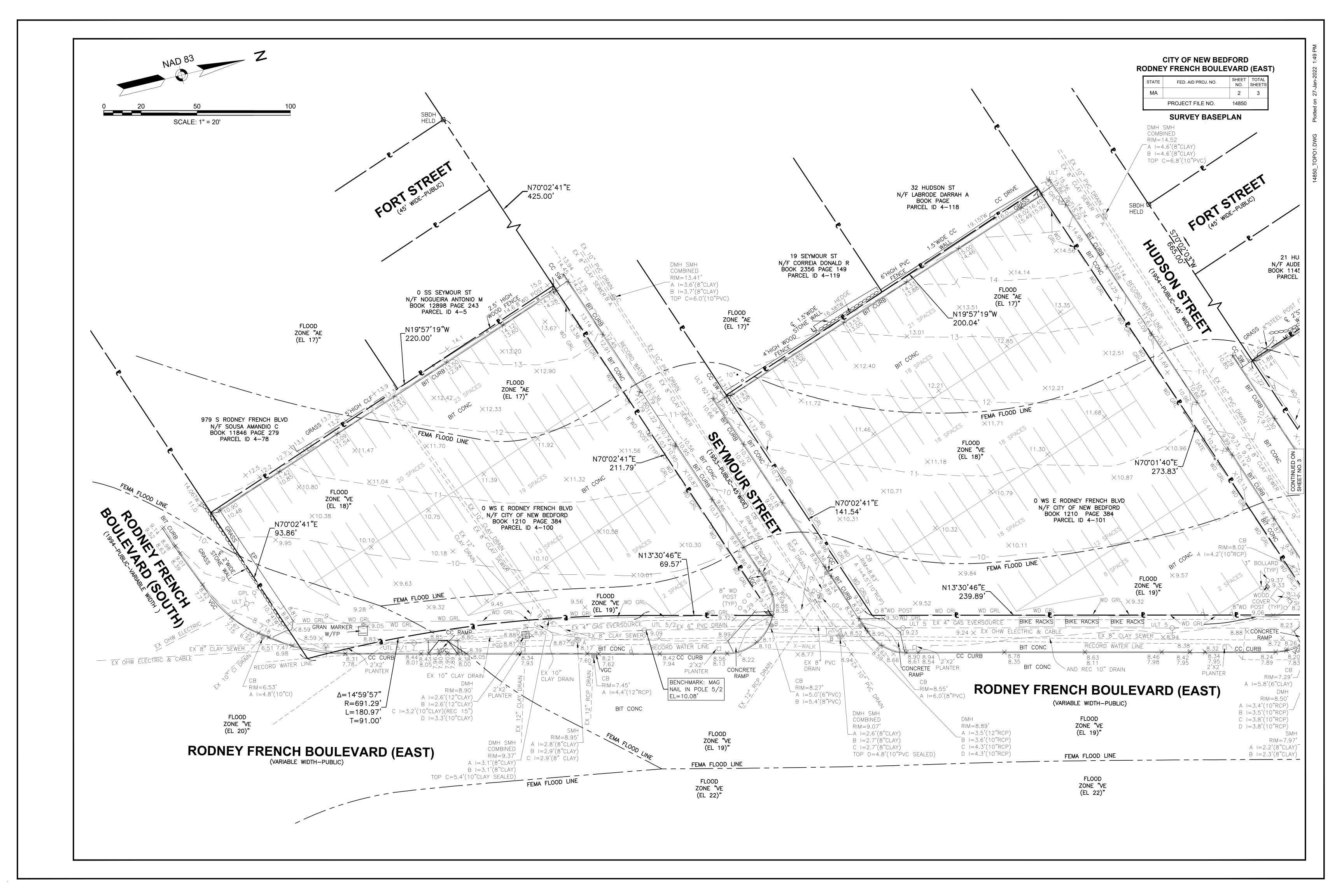
		Nitsch	Engineering	D BY: NITSCH ENGINEERING 2 CENTER PLAZA, STE. 430 BOSTON, MA 02108 P# 617-338-0063
	REVISIONS			
REV.	COMMENTS	DATE	SCALE: 20	FEET TO THE INCH
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			FIELD BOOK. NO: 7	786
			DRAWN BY: JI B	CHECKED BY: IOS

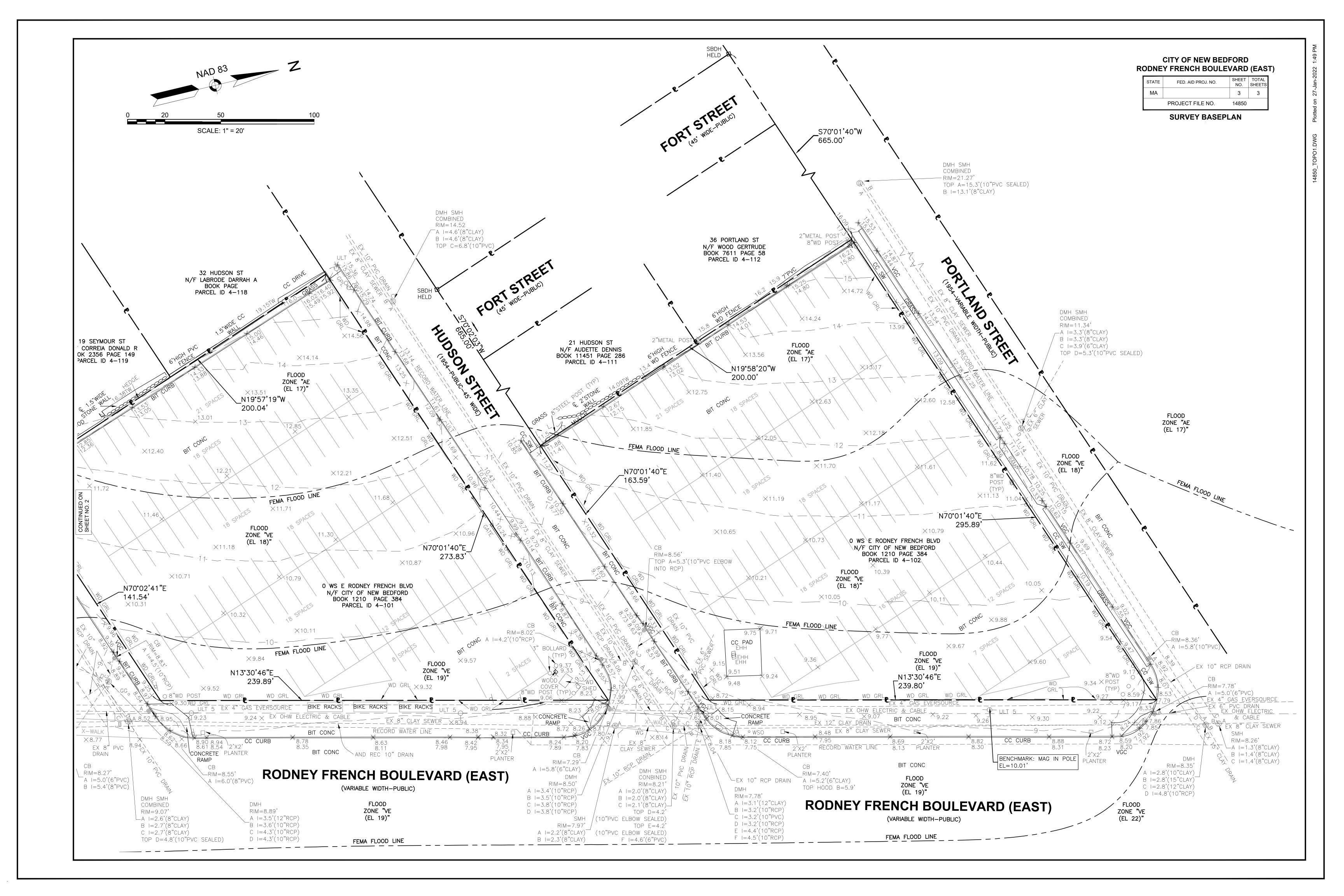
PLAN OF TOPOGRAPHIC SURVEY OF EAST BEACH PARKING LOT RODNEY FRENCH BOULEVARD (EAST) THE CITY OF

NEW BEDFORD AS ORDERED BY

THE CITY OF NEW BEDFORD PARKS RECREATION & BEACHES

SHEET 1 OF 3





DEMOLITION NOTES:

- 1. SITE PREPARATION AND DEMOLITION SHALL INCLUDE THOSE AREAS WITHIN THE LIMIT OF WORK LINE AS SHOWN ON THE CONTRACT DOCUMENTS.
- 2. ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- 3. CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS BEFORE COMMENCING DEMOLITION.
- 4. THE CONTRACTOR SHALL COORDINATE SITE DEMOLITION EFFORTS WITH ALL TRADES THAT MAY BE AFFECTED BY THE WORK.
- 5. ALL ITEMS REQUIRING REMOVAL SHALL BE REMOVED TO FULL DEPTH TO INCLUDE BASE MATERIAL AND FOOTINGS OR FOUNDATIONS AS REQUIRED TO FACILITATE CONSTRUCTION, AND LEGALLY DISPOSED OF OFFSITE BY CONTRACTOR.
- 6. UTILITY PIPES DESIGNATED TO BE ABANDONED IN PLACE SHALL BE PLUGGED AT THEIR ENDS WITH WATERTIGHT BRICK MASONRY OR CEMENT MORTAR WITH A MINIMUM THICKNESS OF 8 INCHES.
- 7. UTILITY PIPES DESIGNATED TO BE REMOVED SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF THE ENTIRE LENGTH OF PIPE AND BACKFILL AND 95% COMPACTION OF THE VOID WITH ORDINARY BORROW. WHEN THE VOID IS WITHIN THE FOOTPRINT OF THE NEW BUILDING, GRAVEL BORROW SHALL BE USED TO BACKFILL THE VOID.
- 8. UTILITY STRUCTURES DESIGNATED TO BE ABANDONED IN PLACE SHALL HAVE THEIR CAST IRON CASTINGS REMOVED AND DISPOSED, INLET AND OUTLET PIPES PLUGGED, THE BOTTOM OF THE STRUCTURES SHALL BE BROKEN, THE VOID OF THE STRUCTURES SHALL BE BACKFILLED AND COMPACTED TO 95% WITH ORDINARY BORROW OR FLOWABLE FILL, AND THE TOP OF THE STRUCTURE SHALL BE REMOVED SO THAT IT IS AT LEAST 36 INCHES BELOW FINISH GRADE.
- 9. UTILITY STRUCTURES DESIGNATED TO BE REMOVED SHALL CONSIST OF THE REMOVAL AND DISPOSAL OF CAST IRON CASTINGS, PLUGGING OF INLET AND OUTLET PIPES, REMOVAL OF THE STRUCTURE, AND BACKFILL AND 95% COMPACTION OF THE VOID WITH ORDINARY BORROW. WHEN HE VOID IS WITHIN THE FOOTPRINT OF THE NEW BUILDING, GRAVEL BORROW SHALL BE USED TO BACKFILL THE VOID.
- 10. ALL DEBRIS GENERATED DURING SITE PREPARATION ACTIVITIES SHALL BE LEGALLY DISPOSED OF OFFSITE.
- 11. AT ALL LOCATIONS WHERE EXISTING CURBING, CONCRETE PAVEMENT OR BITUMINOUS CONCRETE ROADWAY ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE.
- 12. EXTEND DESIGNATED LIMIT OF WORK AS NECESSARY TO ACCOMPLISH ROUGH GRADING, EROSION CONTROL, TREE PROTECTION, AND SITE WORK AS REQUIRED BY THESE DRAWINGS AND SPECIFICATIONS.
- 13. THE CONTRACTOR SHALL REMOVE FROM THE SITE ALL RUBBISH AND DEBRIS FOUND THEREON. STORAGE OF SUCH MATERIALS ON THE PROJECT SITE WILL NOT BE PERMITTED. THE CONTRACTOR SHALL LEAVE THE SITE IN SAFE, CLEAN, AND LEVEL CONDITION UPON COMPLETION OF THE SITE DEMOLITION WORK.
- 14. REMOVE AND STOCKPILE ALL EXISTING SITE LIGHTS, BENCHES, TRASH RECEPTACLES, TRAFFIC SIGNS, GRANITE CURB, AND OTHER SITE IMPROVEMENTS WITHIN LIMIT OF WORK LINE UNLESS OTHERWISE NOTED.
- 15. ALL EXISTING TREES AND SHRUBS TO REMAIN SHALL BE PROTECTED AND MAINTAINED THROUGHOUT THE TIME OF CONSTRUCTION, AS SPECIFIED AND DIRECTED BY THE LANDSCAPE ARCHITECT.
- 16. BEFORE ANY TREES OR SHRUBS ARE REMOVED, THE CONTRACTOR SHALL ARRANGE A CONFERENCE ON THE SITE WITH THE OWNER OR OWNER'S REPRESENTATIVE TO IDENTIFY TREES AND SHRUBS THAT ARE TO BE REMOVED, AS WELL AS THOSE WHICH ARE TO BE PROTECTED. DO NOT COMMENCE CLEARING OPERATIONS WITHOUT A CLEAR UNDERSTANDING OF EXISTING CONDITIONS TO BE PRESERVED.
- 17. THE CONTRACTOR SHALL REMOVE FROM THE AREA OF CONSTRUCTION PAVEMENT, CONCRETE, CURBING, POLES AND FOUNDATIONS, ISLANDS, TREE BERMS AND OTHER FEATURES WITHIN THE LIMITS OF CONSTRUCTION AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION WHETHER SPECIFIED ON THE DRAWINGS OR NOT.

EARTH MOVING AND GRADING NOTES:

- 1. ALL TOPSOIL ENCOUNTERED WITHIN THE WORK AREA SHALL BE STRIPPED TO ITS FULL DEPTH AND STOCKPILED FOR REUSE. EXCESS TOPSOIL SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED BY THE OWNER. TOPSOIL PILES SHALL REMAIN SEGREGATED FROM EXCAVATED SUBSURFACE SOIL MATERIALS.
- 2. GRADES WITHIN HANDICAP PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 1.5% IN ANY
- 3. CROSS SLOPES OF ALL PEDESTRIAN WALKS SHALL NOT EXCEED 1.5%.
- 4. RUNNING SLOPE OF ALL PEDESTRIAN WALKS SHALL NOT EXCEED 4.5%, UNLESS OTHERWISE NOTED.
- 5. THE CONTRACTOR SHALL EXERCISE CAUTION IN ALL EXCAVATION ACTIVITY DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES.
- 6. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MINIMUM OF 1% UNLESS OTHERWISE NOTED.
- 7. PROVIDE POSITIVE DRAINAGE AWAY FROM FACE OF BUILDINGS AT ALL LOCATIONS.
- 8. PITCH EVENLY BETWEEN CONTOUR LINES AND BETWEEN SPOT GRADES. SPOT GRADE ELEVATIONS TAKE PRECEDENCE OVER CONTOUR LINES.
- 9. ALL PROPOSED TOP OF CURB ELEVATIONS ARE SIX INCHES (6") ABOVE BOTTOM OF CURB ELEVATIONS UNLESS OTHERWISE NOTED. ALL PROPOSED TOP OF CAPE COD BERM ELEVATIONS ARE FOUR INCHES (4") ABOVE BOTTOM OF CURB ELEVATION UNLESS OTHERWISE NOTED.
- 10. THE CONTRACTOR SHALL BLEND NEW GRADING SMOOTHLY INTO EXISTING GRADING AT LIMITS OF
- 11. WHERE NEW PAVING MEETS EXISTING PAVING, MEET LINE AND GRADE OF EXISTING PAVING WITH SMOOTH TRANSITION BETWEEN EXISTING AND NEW SURFACES.
- 12. THE CONTRACTOR SHALL VERIFY EXISTING GRADES IN THE FIELD AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.
- 13. SURPLUS MATERIALS SHALL BE REMOVED FROM THE SITE UNLESS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE. REFER TO EARTHWORK SPECIFICATIONS.
- 14. ANY AREAS OUTSIDE OF THE LIMIT OF WORK THAT ARE DISTURBED SHALL BE RESTORED BY THE CONTRACTOR TO THE PRE-CONSTRUCTION CONDITION/GRADE AT NO COST TO THE OWNER.
- 15. EXCAVATION REQUIRED WITHIN PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST TO OWNER.

EROSION AND SEDIMENT CONTROL NOTES:

- 1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE LATEST EDITION OF THE "MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS" PREPARED BY DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF RESOURCE PROTECTION, AND THE CURRENT NPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES.
- 2. MEANS OF EROSION AND SEDIMENT PROTECTION AS NOTED ON THE DRAWINGS INDICATE MINIMUM RECOMMENDED PROVISIONS. THE CONTRACTOR IS RESPONSIBLE FOR FINAL SELECTION AND PLACEMENT OF EROSION AND SEDIMENTATION CONTROLS BASED ON ACTUAL SITE CONDITIONS AND CONSTRUCTION CONDITIONS. ADDITIONAL MEANS OF PROTECTION SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED FOR CONTINUED OR UNFORESEEN EROSION PROBLEMS, OR AS DIRECTED BY CONTROLLING MUNICIPAL AUTHORITIES, AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 3. AN EROSION CONTROL BARRIER SHALL BE INSTALLED ALONG THE EDGE OF PROPOSED DEVELOPMENT AS INDICATED IN THE PLAN PRIOR TO COMMENCEMENT OF DEMOLITION OR CONSTRUCTION OPERATIONS.
- 4. SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF AND DURING ALL PHASES OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO AND IMMEDIATELY AFTER ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON THE SITE.
- 5. AFTER ANY SIGNIFICANT RAINFALL (GREATER THAN 0.25 INCHES OF RAINFALL WITHIN 24 HOURS), SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED FOR INTEGRITY. ANY DAMAGE SHALL BE CORRECTED IMMEDIATELY.
- 6. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES SHALL BE PROVIDED TO ENSURE THAT THE INTENDED PURPOSE IS ACCOMPLISHED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SEDIMENT LEAVING THE LIMIT OF WORK. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING SEDIMENT FROM ENTERING ANY STORM DRAINAGE SYSTEM AND FROM BEING CONVEYED TO ANY WETLAND RESOURCE AREA, PUBLIC WAYS, ABUTTING PROPERTY, OR OUTSIDE OF THE PROJECT LIMITS.
- 8. THE CONTRACTOR SHALL PROTECT ALL DRAINAGE SWALES AND GROUND SURFACES WITHIN THE LIMIT OF WORK FROM EROSIVE CONDITIONS. STRAW BALE, CRUSHED STONE OR EQUIVALENT CHECK DAMS ARE TO BE PROVIDED AT A MAXIMUM OF TWO HUNDRED (200) FOOT SPACING, OR LESS AS SITE—SPECIFIC CONDITIONS WARRANT, WITHIN ALL DRAINAGE SWALES AND DITCHES AND AT UPSTREAM SIDES OF ALL DRAINAGE INLETS.
- 9. ALL STOCK PILES SHALL BE PROTECTED AND LOCATED A MINIMUM OF 100' FROM EXISTING WETLAND RESOURCE AREAS & WITHIN THE LIMIT OF WORK.
- 10. ANY SEDIMENT TRACKED ONTO PAVED AREAS SHALL BE SWEPT AT THE END OF EACH WORKING DAY.
- 11. ALL SEDIMENT RETAINED BY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE LEGALLY DISPOSED OF OFFSITE.
- 12. TEMPORARY DIVERSION DITCHES, PERMANENT DITCHES, CHANNELS, EMBANKMENTS, AND ANY DENUDED SURFACE THAT WILL BE EXPOSED FOR A PERIOD OF 14 CALENDAR DAYS OR MORE SHALL BE CONSIDERED CRITICAL VEGETATION AREAS. THESE AREAS SHALL BE STABILIZED/PROTECTED WITH APPROPRIATE EROSION CONTROL MATTING OR OTHER EROSION CONTROL METHODS.
- 13. DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS AS DIRECTED BY THE PERMITTING AUTHORITY OR OWNER.
- 14. THE CONTRACTOR SHALL USE TEMPORARY SEEDING, MULCHING, OR OTHER APPROVED STABILIZATION MEASURES TO PROTECT EXPOSED AREAS DURING PROLONGED CONSTRUCTION OR OTHER LAND DISTURBANCE. STOCKPILES THAT WILL BE EXPOSED FOR LONGER THAN 14 DAYS SHALL BE STABILIZED.
- 15. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL EROSION AND SEDIMENT CONTROLS AT THE COMPLETION OF SITE CONSTRUCTION, BUT ONLY WHEN DIRECTED BY THE CITY OF NEW BEDFORD CONSERVATION AGENT OR THEIR REPRESENTATIVE. STABILIZE OR SEED BARE AREAS LEFT AFTER EROSION CONTROL REMOVAL.

UTILITY NOTES:

- 1. ALL UTILITY CONNECTIONS ARE SUBJECT TO THE APPROVAL OF, AND GRANTING OF PERMITS BY, THE LOCAL MUNICIPALITY. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL PERMITS AND APPROVALS RELATED TO UTILITY WORK PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 2. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR OBTAINING ALL PERMISSIONS FOR, AND FOR CONDUCTING ALL PREPARATIONS RELATED TO, WORK AFFECTING ANY UTILITIES WITHIN THE JURISDICTION OF ANY NON-MUNICIPAL UTILITY COMPANY, INCLUDING BUT NOT LIMITED TO ELECTRIC, TELEPHONE, AND/OR GAS. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE AGENCIES, DEPARTMENTS, AND UTILITY COMPANIES, IN WRITING, AT LEAST 7 DAYS (OR PER UTILITY COMPANY REQUIREMENT) AND NOT MORE THAN 30 DAYS PRIOR TO ANY CONSTRUCTION.
- 3. THE CONTRACTOR SHALL MAINTAIN UTILITIES SERVICING BUILDINGS AND FACILITIES WITHIN OR OUTSIDE THE PROJECT LIMIT UNLESS THE INTERRUPTION OF SERVICE IS COORDINATED WITH THE OWNER.
- 4. ALL WATER, SEWER, AND DRAIN WORK SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS AND STANDARD SPECIFICATIONS OF THE LOCAL MUNICIPALITY.
- 5. GAS, TELECOMMUNICATIONS AND ELECTRIC SERVICES ARE TO BE DESIGNED BY EACH UTILITY COMPANY IN COORDINATION WITH THE MECHANICAL, ELECTRIC, AND PLUMBING CONSULTANTS.
- 6. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES OF NEW UTILITIES WITH GAS, TELECOMMUNICATION AND ELECTRICAL SERVICES.
- 7. INSTALL WATER LINES WITH A MINIMUM OF FIVE FEET OF COVER AND A MAXIMUM OF SEVEN FEET
- 8. MAINTAIN 10 FEET HORIZONTAL SEPARATION AND 18 INCHES VERTICAL SEPARATION (WATER OVER SEWER) BETWEEN SEWER AND WATER LINES. WHEREVER THERE IS LESS THAN 10 FEET OF HORIZONTAL SEPARATION AND 18 INCHES OF VERTICAL SEPARATION BETWEEN A PROPOSED OR EXISTING SEWER LINE TO REMAIN AND A PROPOSED OR EXISTING WATER LINE TO REMAIN BOTH WATER MAIN AND SEWER MAIN SHALL BE CONSTRUCTED OF MECHANICAL JOINT CEMENT LINED DUCTILE IRON PIPE FOR A DISTANCE OF 10—FEET ON EITHER SIDE OF THE CROSSING. ONE (1) FULL LENGTH OF WATER PIPE SHALL BE CENTERED OVER THE SEWER AT THE CROSSING.
- 9. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES EXCEPT THOSE NOTED TO BE ABANDONED AND/OR REMOVED & DISPOSED.
- 10. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR TRENCHING, BACKFILLING, AND SURFACE RESTORATION FOR GAS UTILITY SYSTEMS.
- 11. ALL ONSITE UTILITIES SHALL BE INSTALLED UNDERGROUND UNLESS OTHERWISE NOTED.
- 12. ALL EXISTING AND PROPOSED MANHOLE FRAMES, COVERS, VALVES, CLEANOUTS, CASTINGS, ETC. SHALL BE RAISED TO FINISHED GRADE PRIOR TO FINAL GRADING AND PAVING CONSTRUCTION.

13. ALL GRATES IN WALKWAYS SHALL BE ADA COMPLIANT.

COVER FROM THE FINAL DESIGN GRADES.

GENERAL NOTES:

IMPROVEMENTS.

- 1. TOPOGRAPHIC DATA, PROPERTY LINE INFORMATION, AND EXISTING SITE FEATURES WERE OBTAINED FROM A PLAN ENTITLED "EAST BEACH PARKING LOT RODNEY FRENCH BOULEVARD (EAST)", PREPARED BY NITSCH ENGINEERING, DATED 01/27/2022.
- 2. FLOODPLAIN INFORMATION WAS OBTAINED FROM THE FLOOD INSURANCE RATE MAP (FIRM) NO. 25005C0482G. THE SITE IS IN ZONE AE AND ZONE VE.
- 3. THE CONTRACTOR SHALL COMPLY WITH MASSACHUSETTS GENERAL LAWS CHAPTER 82, SECTION 40, AS AMENDED, WHICH STATES THAT NO ONE MAY EXCAVATE IN THE COMMONWEALTH OF MASSACHUSETTS EXCEPT IN AN EMERGENCY WITHOUT 72 HOURS NOTICE, EXCLUSIVE OF SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS, TO NATURAL GAS PIPELINE COMPANIES, AND MUNICIPAL UTILITY DEPARTMENTS THAT SUPPLY GAS, ELECTRICITY, TELEPHONE, OR CABLE TELEVISION SERVICE IN OR TO THE CITY OR TOWN WHERE THE EXCAVATION IS TO BE MADE. THE CONTRACTOR SHALL CALL "DIG SAFE" AT 1-888-DIG-SAFE.
- 4. THE CONTRACTOR SHALL COMPLY WITH MASSACHUSETTS GENERAL LAWS CHAPTER 82A, ALSO REFERRED TO AS JACKIE'S LAW, AS DETAILED IN SECTION 520 CMR 14.00 OF THE CODE OF MASSACHUSETTS REGULATIONS.
- 5. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, REGULATIONS AND SAFETY CODES IN THE CONSTRUCTION OF ALL
- 6. THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES ARE APPROXIMATE AND ALL UTILITIES MAY NOT BE SHOWN. PRESENCE AND LOCATIONS OF ALL UTILITIES WITHIN THE LIMIT OF WORK MUST BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING AND CONTACTING THE CONTROLLING AUTHORITIES AND/OR UTILITY COMPANIES RELATIVE TO THE LOCATIONS AND ELEVATIONS OF THEIR LINES. THE CONTRACTOR SHALL KEEP A RECORD OF ANY DISCREPANCIES OR CHANGES IN THE LOCATIONS OF ANY UTILITIES SHOWN OR ENCOUNTERED DURING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER AND NITSCH ENGINEERING. ANY DAMAGE RESULTING FROM THE FAILURE OF THE CONTRACTOR TO MAKE THESE DETERMINATIONS AND CONTACTS SHALL BE BORNE BY THE CONTRACTOR.
- 7. THE CONTRACTOR SHALL, THROUGHOUT CONSTRUCTION, TAKE ADEQUATE PRECAUTIONS TO PROTECT ALL WALKS, GRADING, SIDEWALKS AND SITE DETAILS OUTSIDE OF THE LIMIT OF WORK AS DEFINED ON THE DRAWINGS AND SHALL REPAIR AND REPLACE OR OTHERWISE MAKE GOOD AS DIRECTED BY THE ENGINEER OR OWNER'S DESIGNATED REPRESENTATIVE ANY SUCH OR OTHER DAMAGE SO CAUSED.
- 8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AND ALL CONSTRUCTION MEANS AND METHODS.
- 9. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE SITE AND CONSTRUCTION DOCUMENTS TO DEVELOP A THOROUGH UNDERSTANDING OF THE PROJECT, INCLUDING ANY SPECIAL CONDITIONS AND CONSTRAINTS.
- 10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PROJECT SITE AND TO VERIFY ALL CONDITIONS IN THE FIELD AND REPORT DISCREPANCIES BETWEEN PLANS AND ACTUAL CONDITIONS TO THE OWNER OR OWNER'S REPRESENTATION IMMEDIATELY.
- 11. THE CONTRACTOR SHALL CONDUCT ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY CONSTRUCTION PERMITS.
- 12. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE ESTABLISHMENT AND USE OF ALL VERTICAL AND HORIZONTAL CONSTRUCTION CONTROLS.
- 13. ELEVATIONS REFER TO NAVD 88.
- 14. THE CONTRACTOR SHALL COMPLY WITH THE ORDER OF CONDITIONS DATED ___/__/2022 AND ISSUED BY THE CITY OF NEW BEDFORD CONSERVATION COMMISSION (DEP #049-0893).
- 15. FOR SOIL INFORMATION REFER TO GEOTECHNICAL REPORT.

PROPOSED LEGEND

GAS PIPE

EXISTING UTILITY TO BE ABANDONED,
REMOVED AND DISPOSED IF IN CONFLICT
WITH NEW SITE IMPROVEMENTS, OR AS

INDICATED ON DRAWINGS

EROSION CONTROL BARRIER

— × — × — CONSTRUCTION FENCE

— W — DOMESTIC WATER PIPE

LIMIT OF WORK

FP FIRE PROTECTION PIPE
SANITARY SEWER PIPE
STORM DRAIN PIPE

INLET PROTECTION

ELECTRIC DUCTBANK

ELEVATION CONTOURS

MATCH LINE

CENTERLINE

■ AREA DRAIN

■ ACCESS BASIN

DRAIN MANHOLE

CATCH BASIN

SEWER MANHOLE

WATER QUALITY INLET

BIORETENTION BASIN EXTENTS

ABBREVIATIONS

- AB ACCESS BASIN
- AD AREA DRAIN
- BC BOTTOM OF CURB ELEVATION
- CB CATCH BASIN
- CCB CAPE COD BERM
 CL CENTER LINE
- CO CLEANOUT
- COP CENTER OF PIPE

 CP CARRIER PIPE
- CPP CORRUGATED POLYETHYLENE PIPE
- DCB DOUBLE CATCH BASIN
- DI DUCTILE IRON PIPE CEMENT LINED
 DMH DRAIN MANHOLE
- EMH ELECTRIC MANHOLE
- HP HIGH POINT
- HYD FIRE HYDRANT
 INV INVERT ELEVATION
- LF LINEAR FEET
- LOW LIMIT OF WORK

 LP LOW POINT
- M&P MAINTAIN AND PROTECT
- NIC NOT IN CONTRACT
 OC ON CENTER
- OCS OUTLET CONTROL STRUCTURE
- PD PERIMETER DRAIN
 PERF PERFORATED
- PVC POLYVINYL CHLORIDE PIPE
- R&D REMOVE AND DISPOSE
- R&S REMOVE AND STOCKPILE
- RD ROOF DRAIN
- RIM RIM ELEVATION
 SMH SEWER MANHOLE
- SMH SEWER MANHOLE
 SS SEWER SERVICE
- SS SEWER SERVICE
 TO TOP OF CURB FLEVATION
- TC TOP OF CURB ELEVATION
 TW TOP OF WALL ELEVATION
- TOP TOP OF PIPE
- TOD TOP OF DUCT BANK
 TYP TYPICAL
- UD UNDERDRAIN
- USD UNDERSLAB DRAIN

 VGC VERTICAL GRANITE CURB
- WQI WATER QUALITY INLET
- WQS WATER QUALITY STRUCTURE
 WV WATER VALVE

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PREPAF CITY OF NEV 181 HILLMAN STREET #3,

V. COMMENTS DATE
REVISIONS

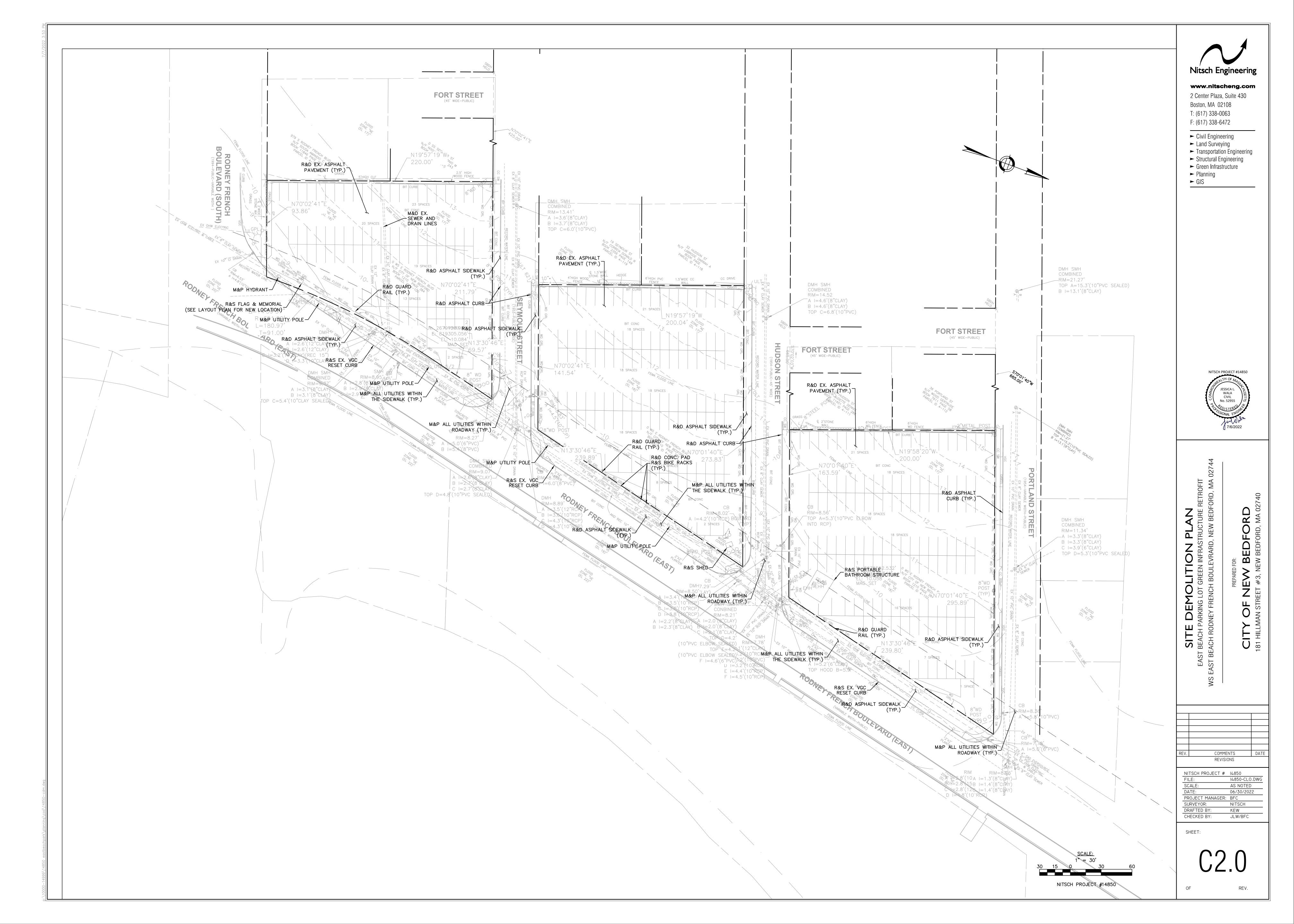
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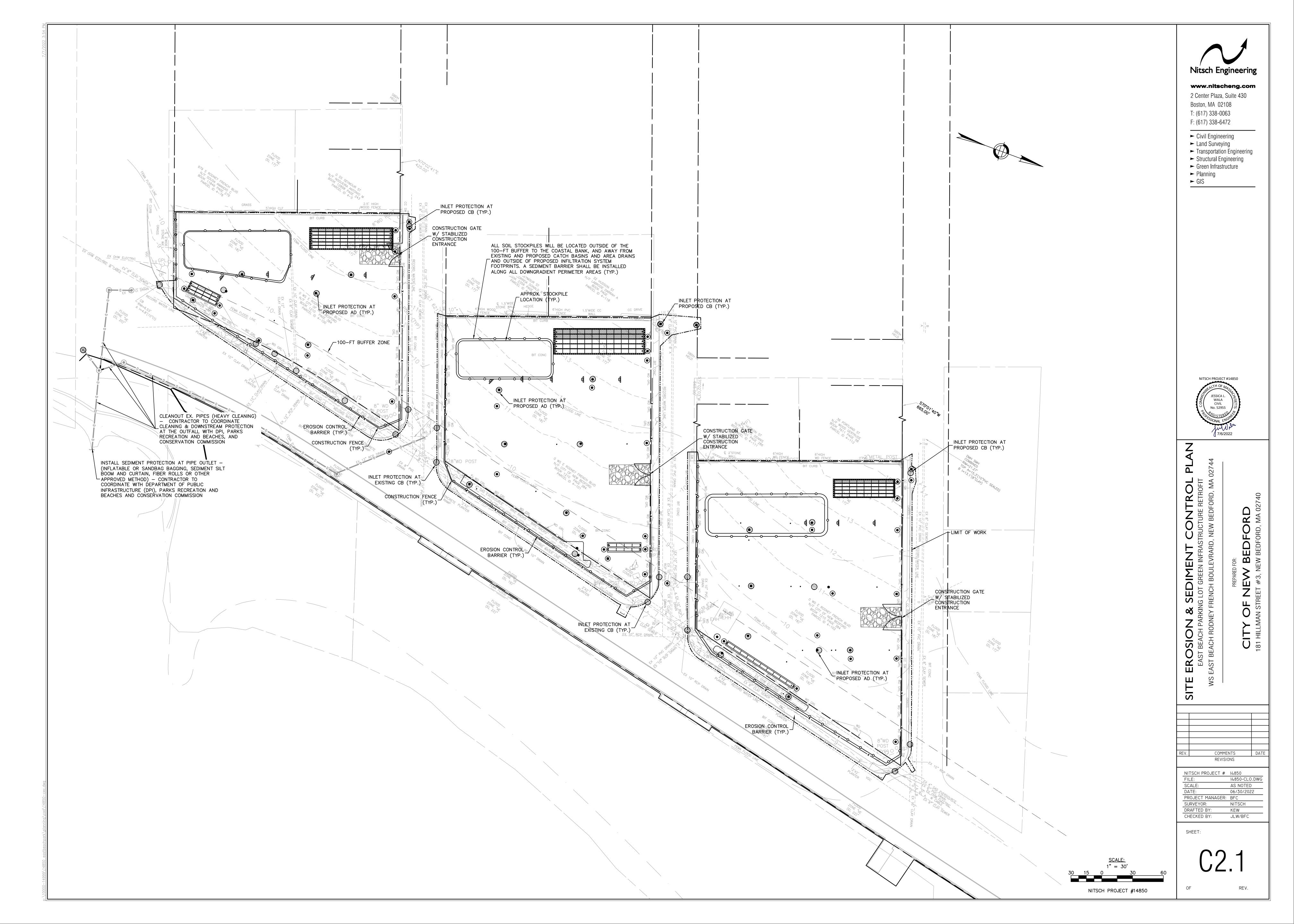
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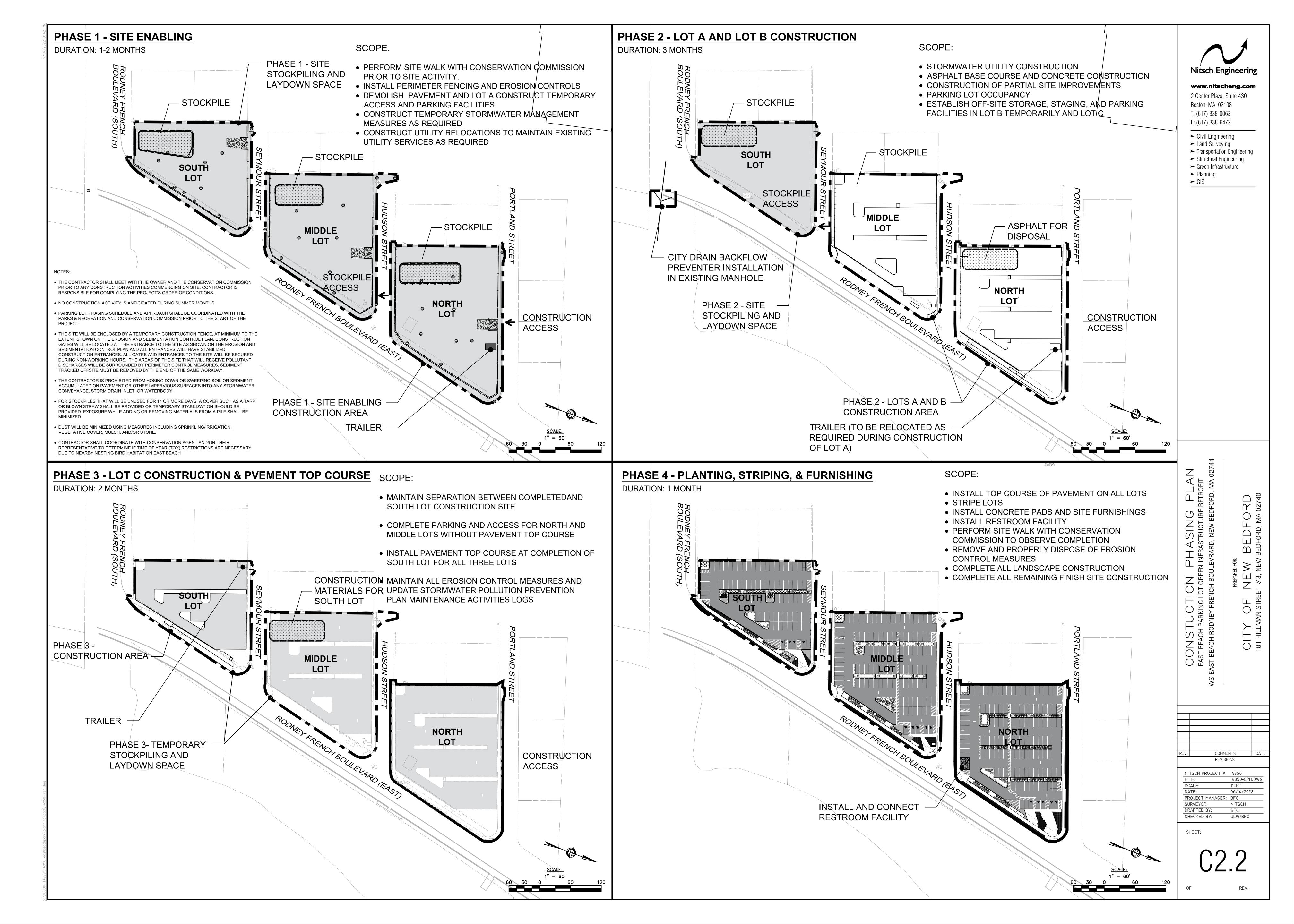
06/30/2022

PROJECT MANAGER: BFC
SURVEYOR: NITS
DRAFTED BY: KEW
CHECKED BY: JLW

F

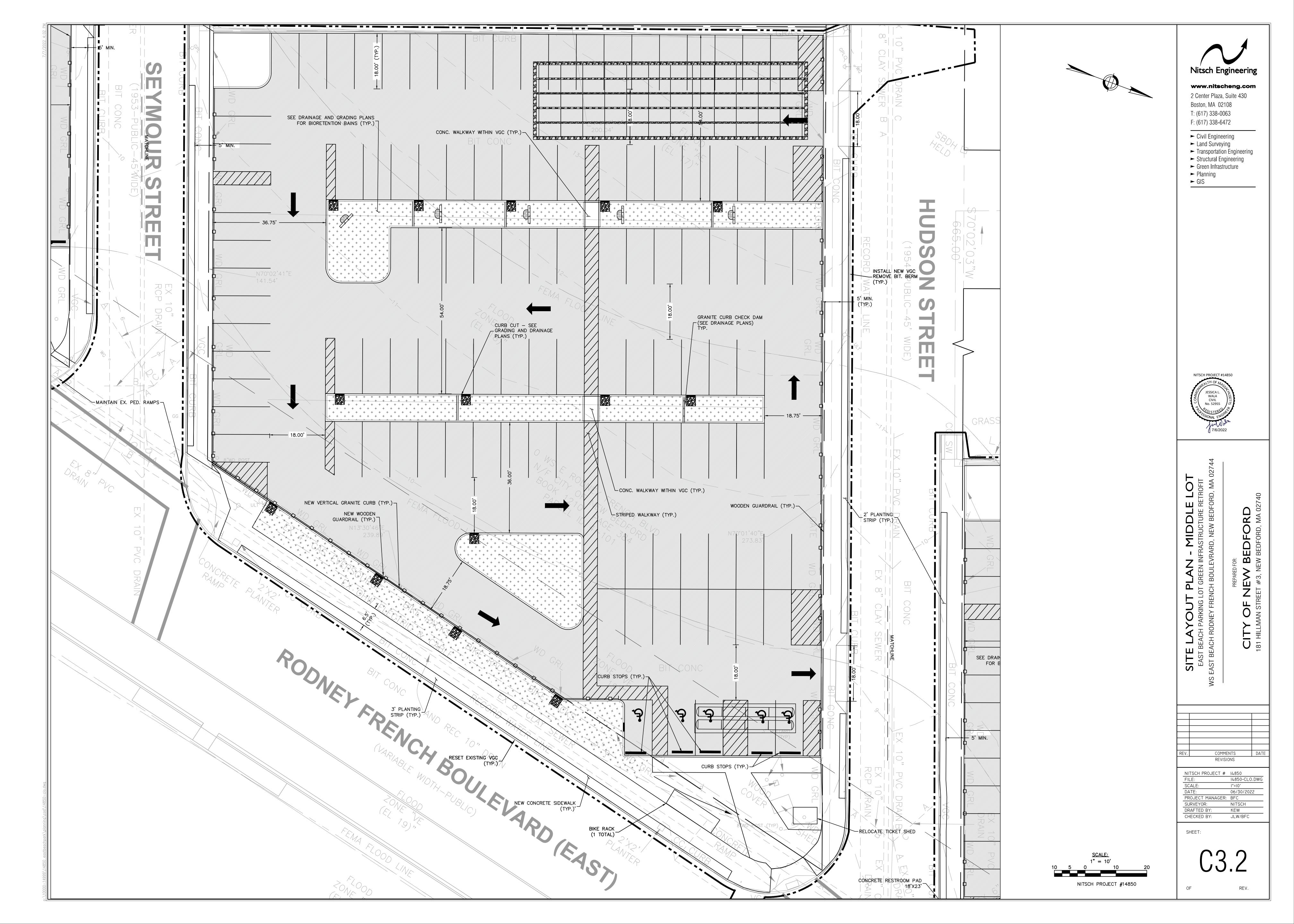




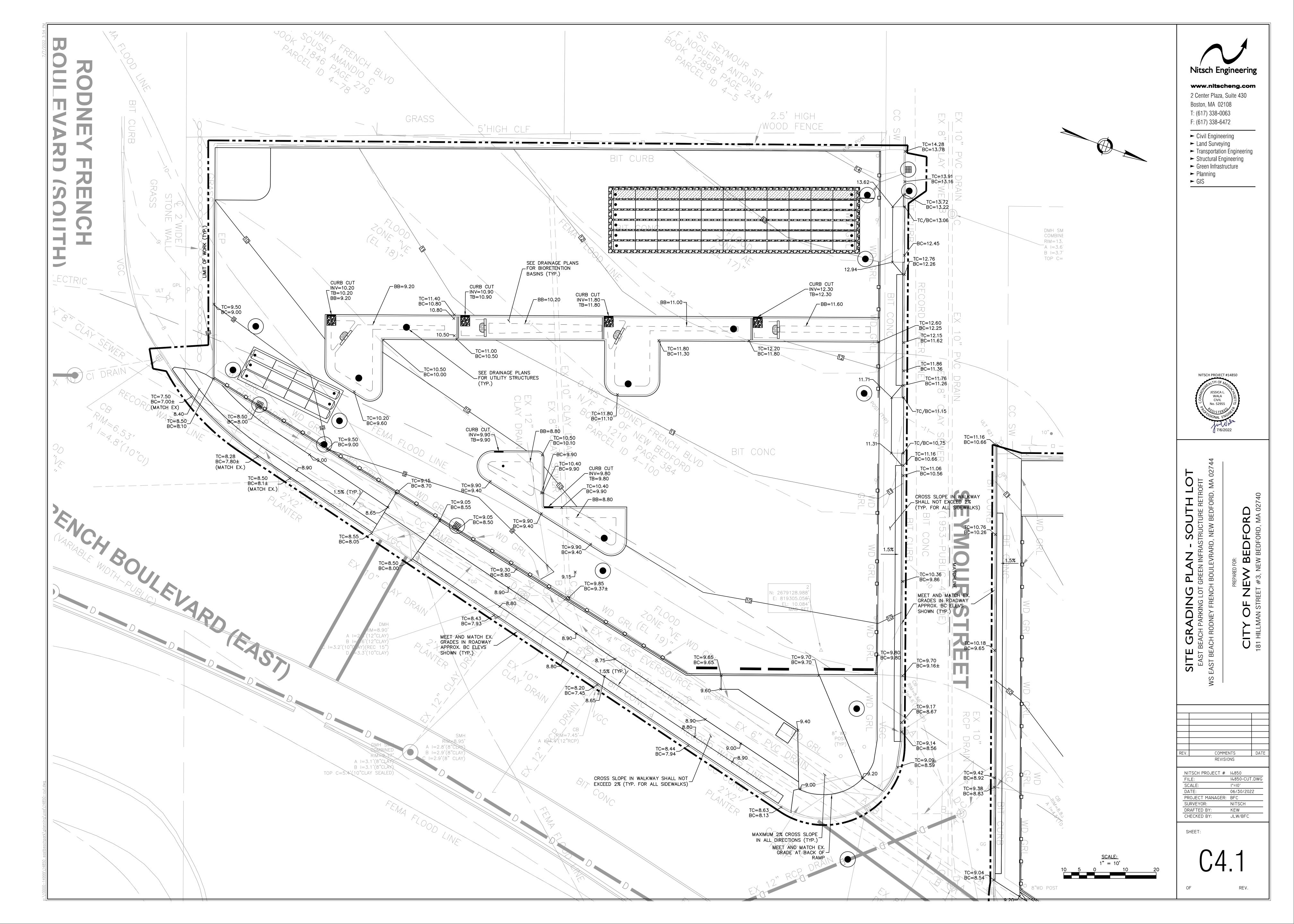


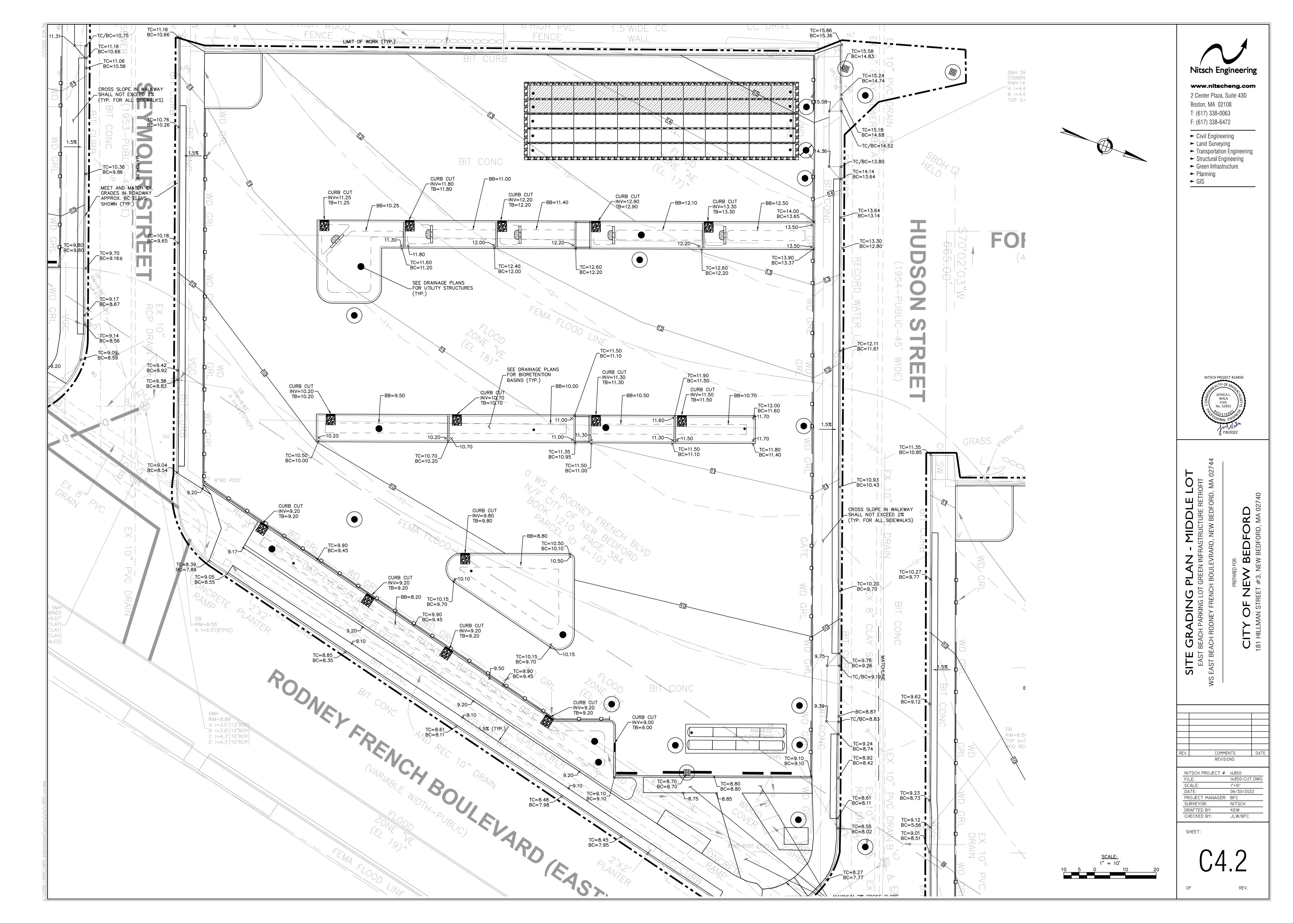


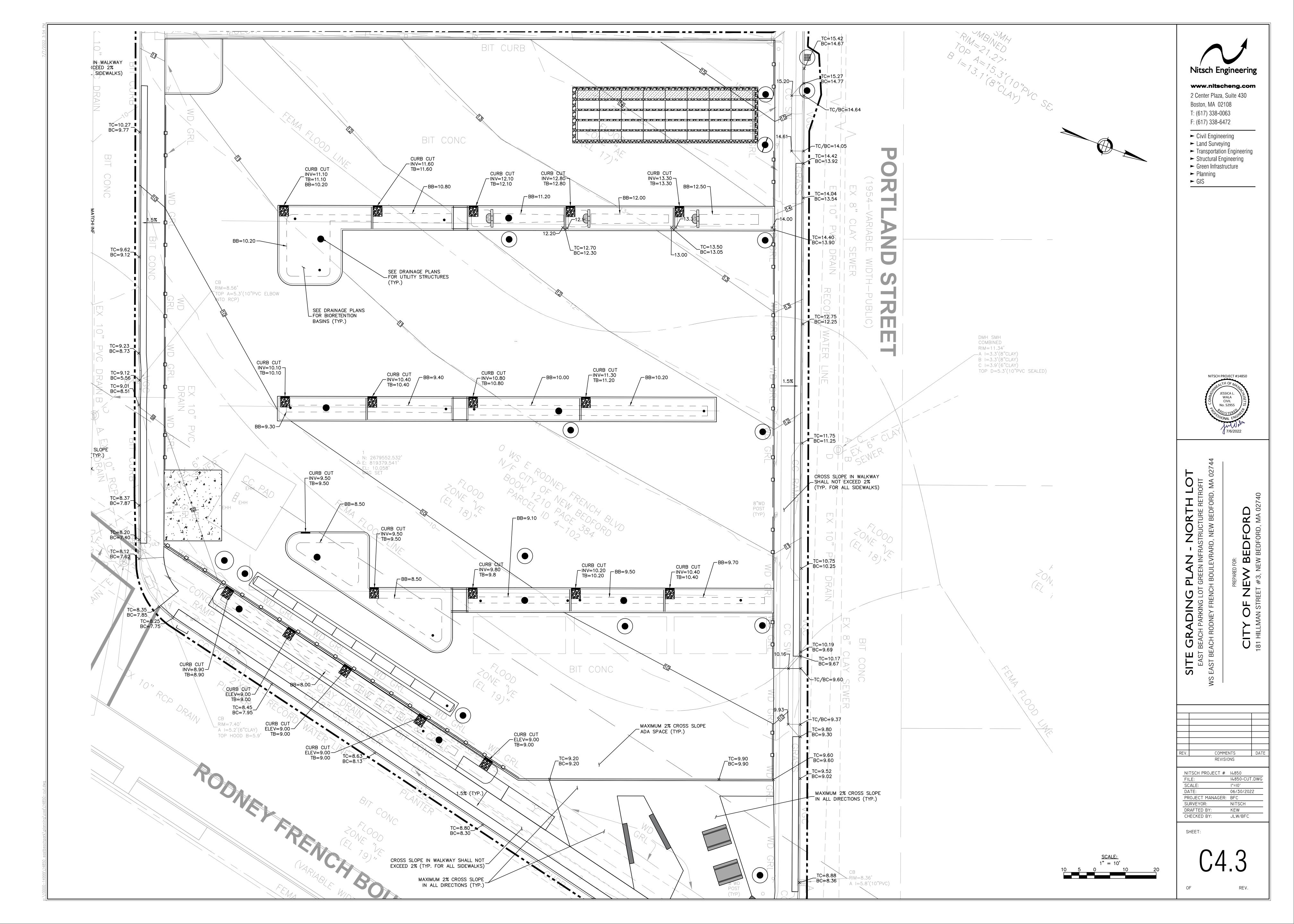


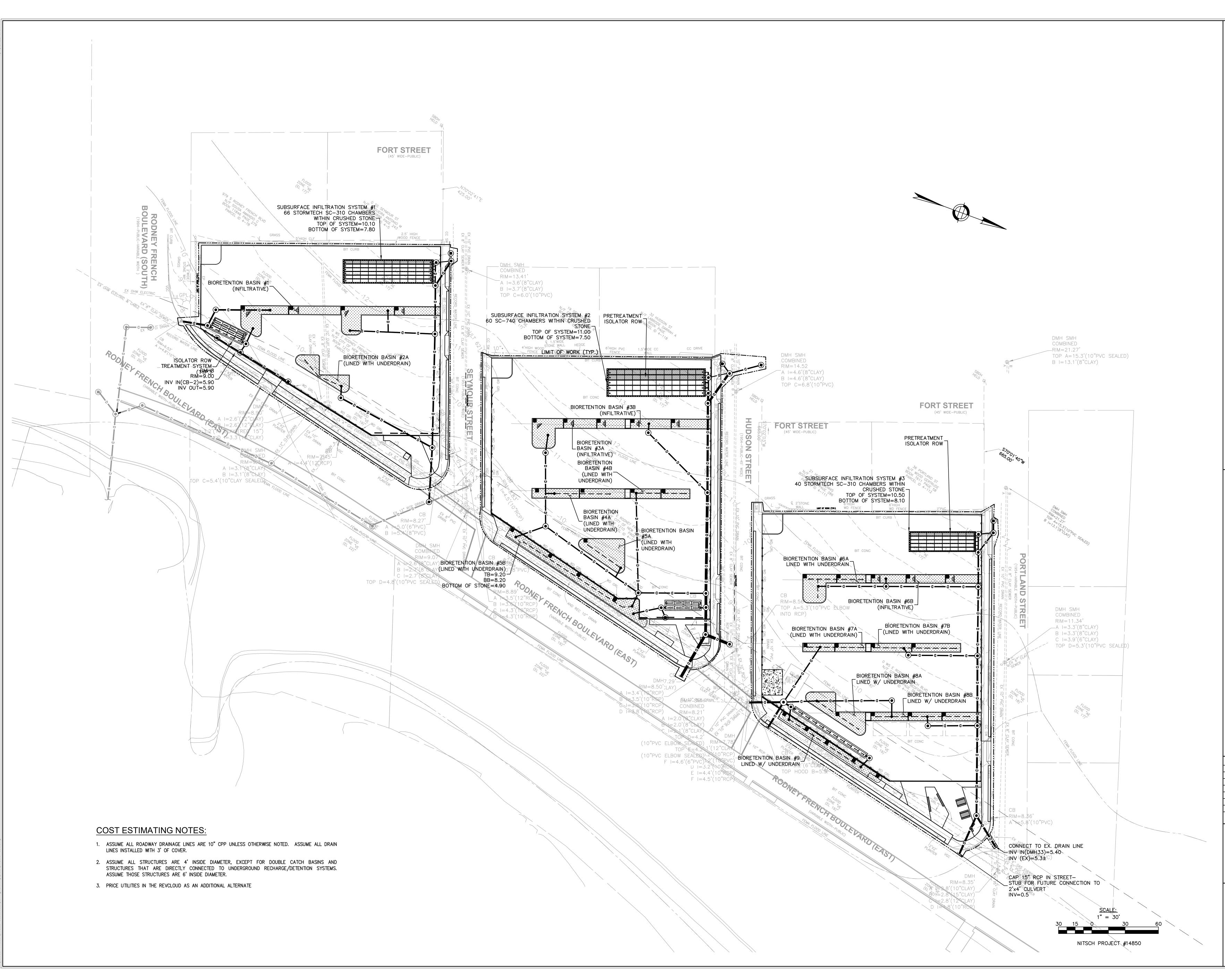














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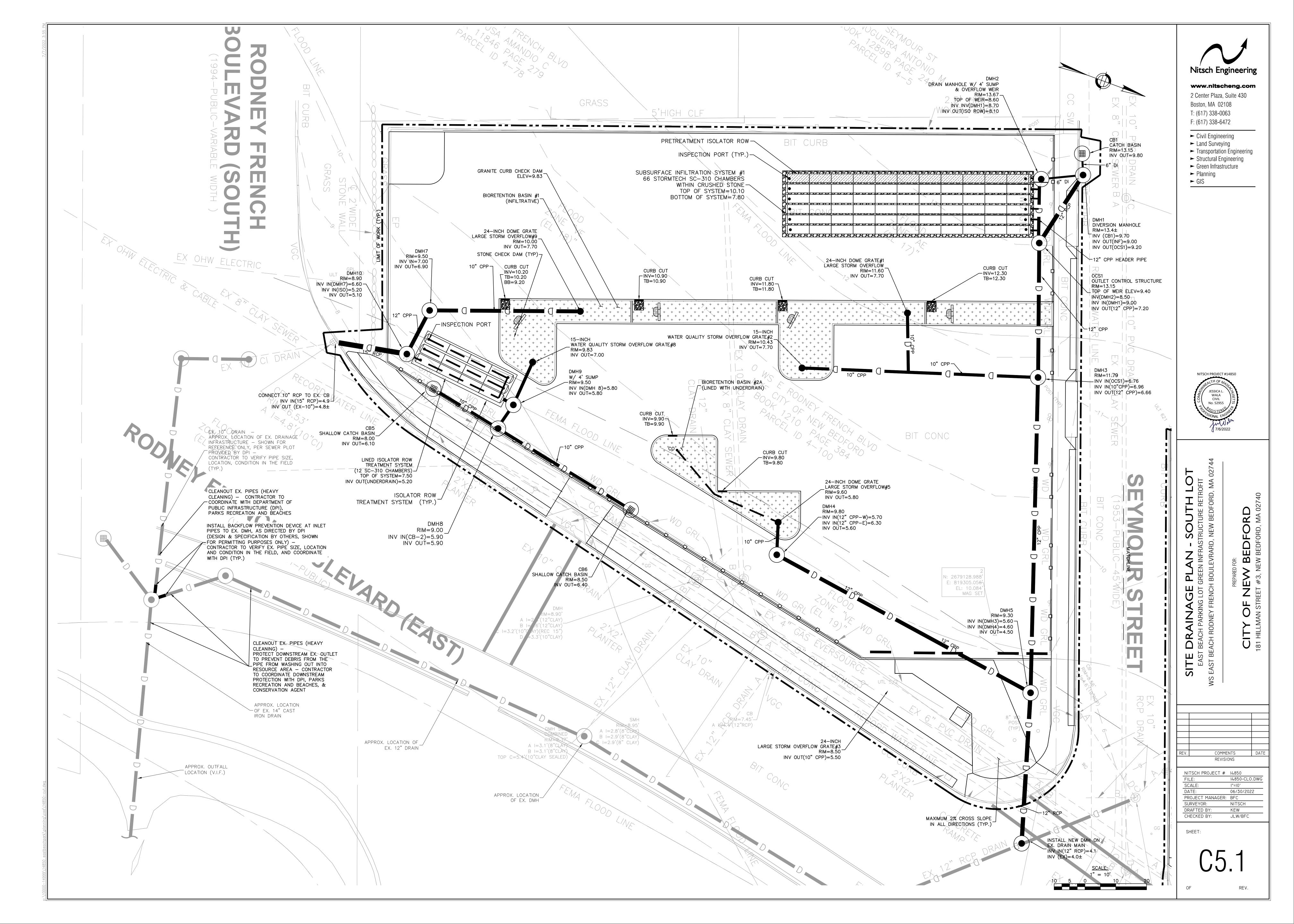
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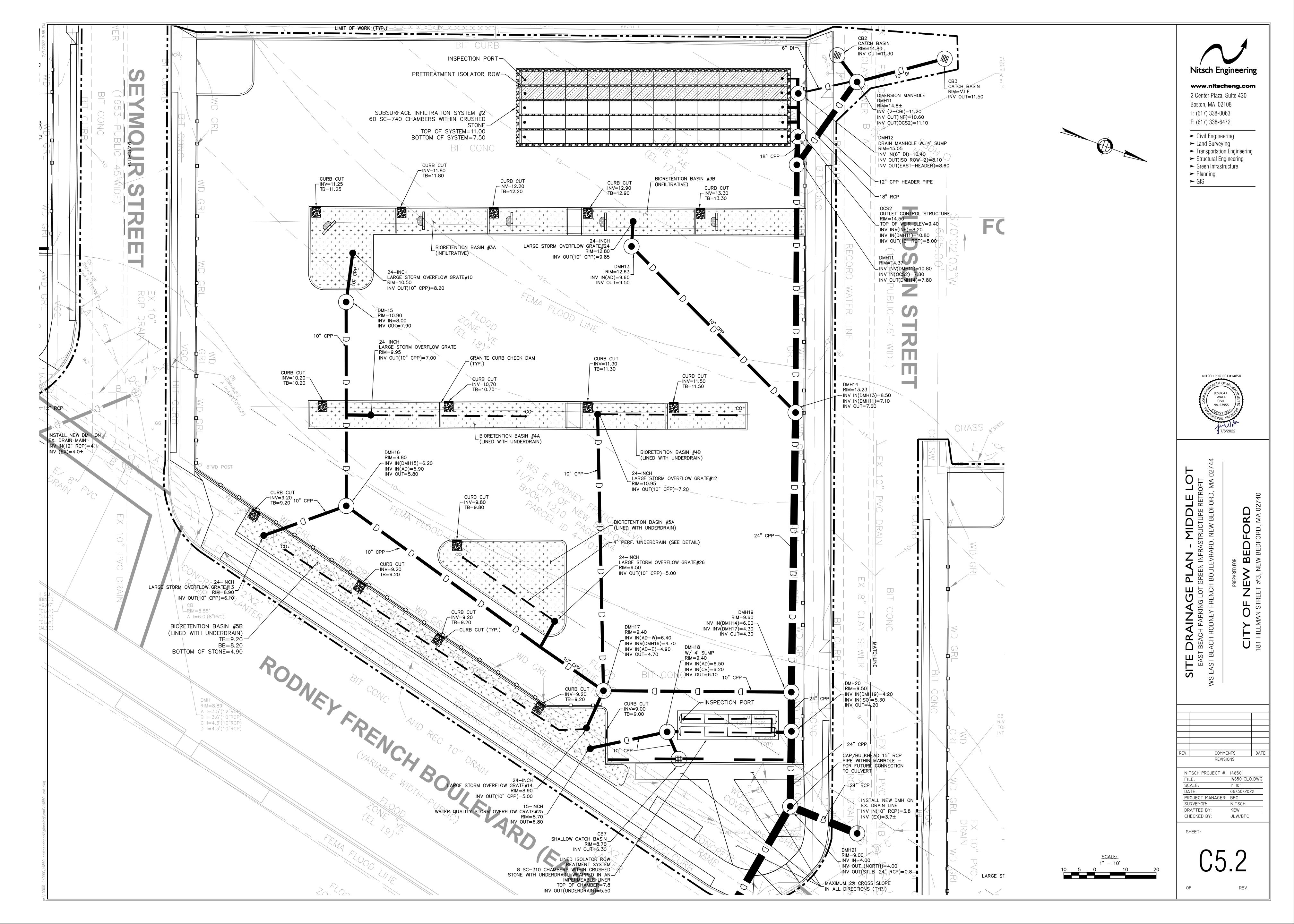
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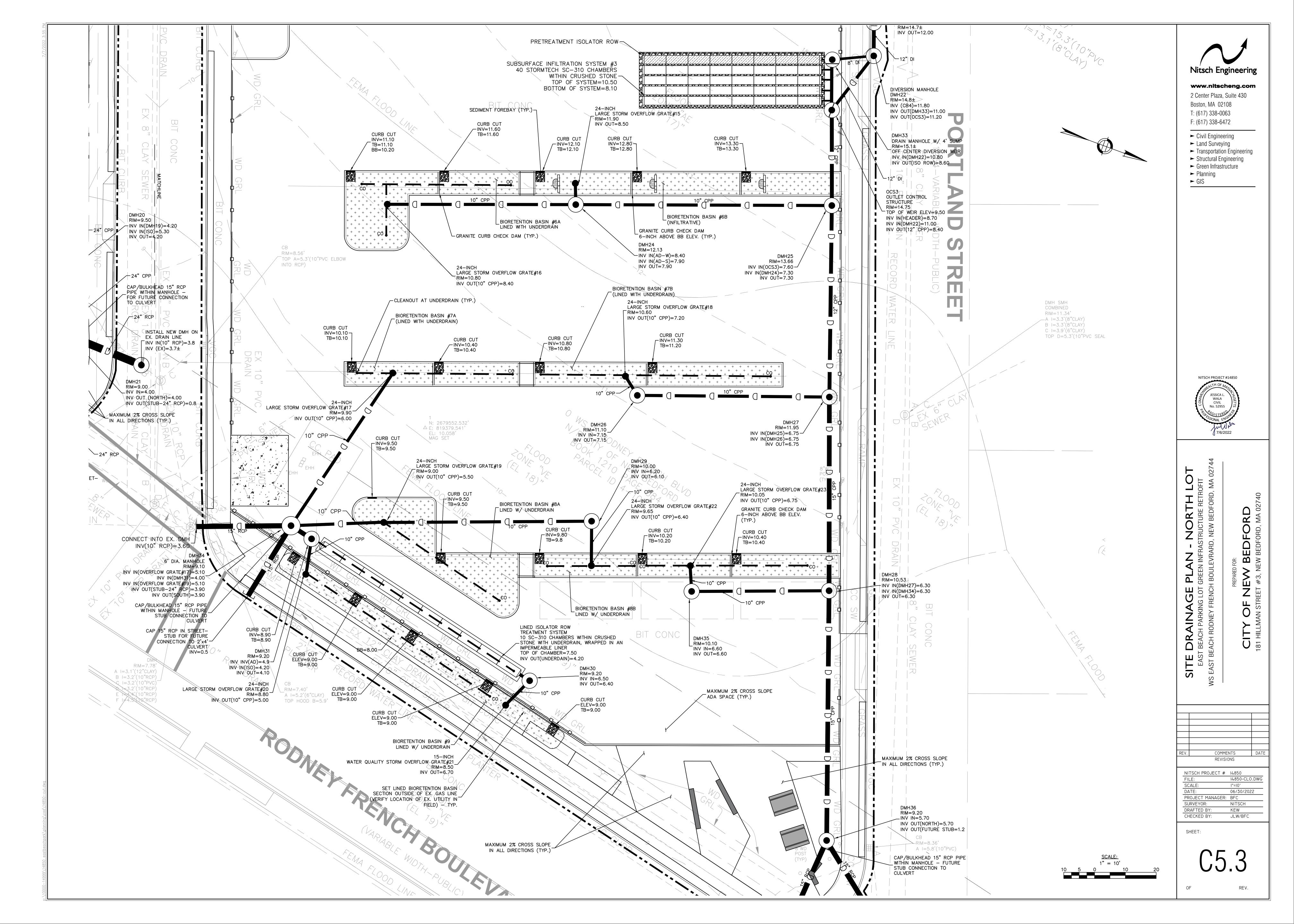
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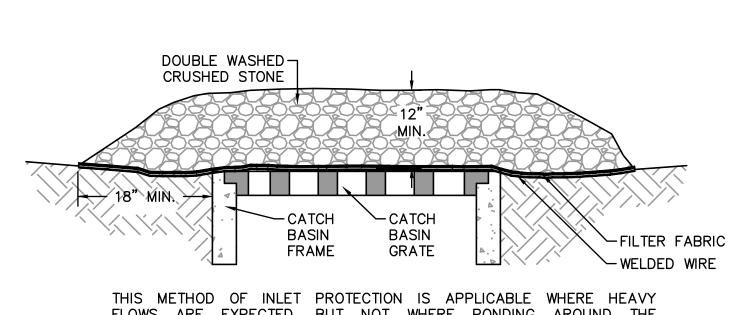
NITSCH PROJECT #	14850
FILE:	14850-CLO.DWG
SCALE:	l"=30'
DATE:	06/30/2022
PROJECT MANAGER:	BFC
SURVEYOR:	NITSCH
DRAFTED BY:	KEW
CHECKED BY:	JLW/BFC

SHEET:



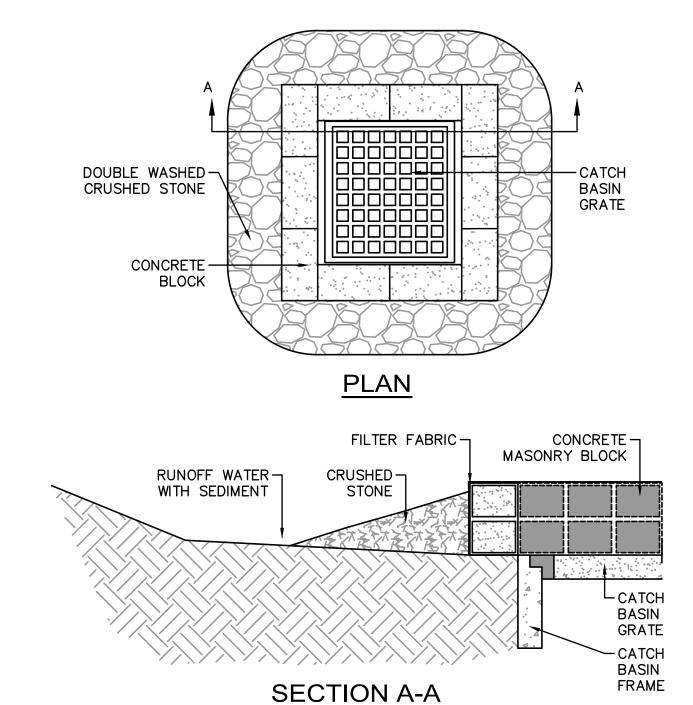






FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS. THIS METHOD NOT ACCEPTABLE IN ACTIVE TRAFFIC AREAS.

INLET PROTECTION DETAIL CATCH BASIN WITH GRAVEL



THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND STRUCTURE.

INLET PROTECTION DETAIL CATCH BASIN W/ BLOCK AND GRAVEL NOT TO SCALE

SHEET

FLOW

9" DIA. STAKED

WATTLES

STORAGE ZONE FOR SLOPES WORK

NOTE: NOT FOR CONCENTRATED FLOWS

MAINTAIN 5' SEDIMENTATION -

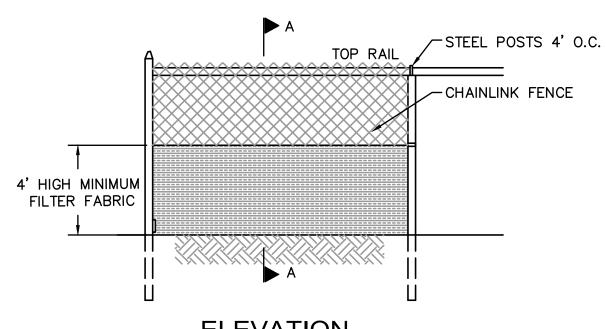
GREATER THAN 4:1

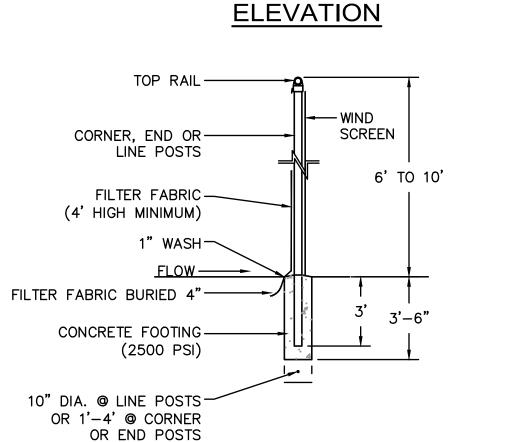
TYPES OF WATTLES

• COIR (COCONUT FIBER)

COMPÓST

STRAW

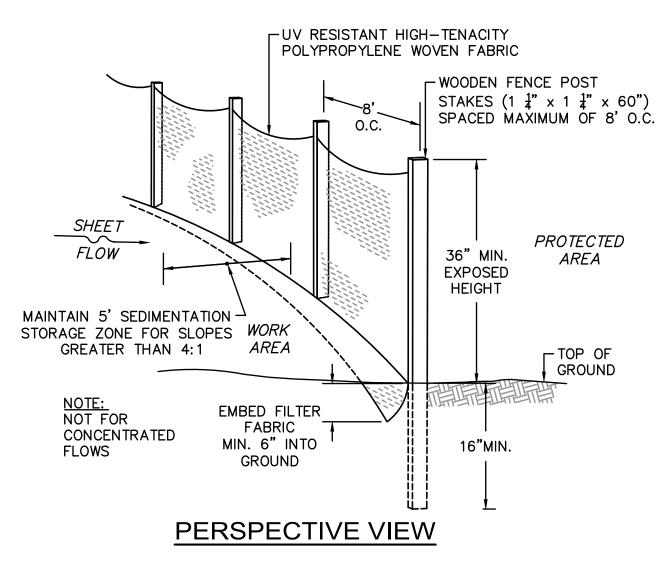


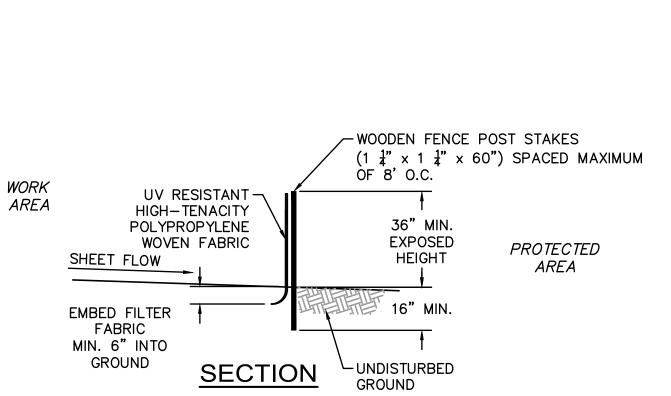


SECTION

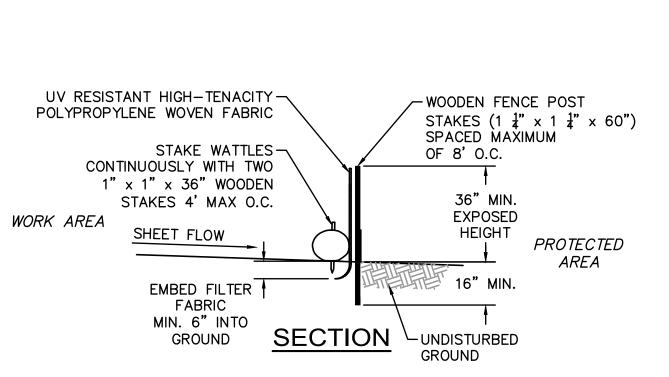
- 1. CHAINLINK FENCE SHALL BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES.
- 2. FILTER FABRIC SHALL BE FASTENED SECURELY TO CHAINLINK FENCE WITH TIES SPACED HORIZONTALLY 24" AS THE TOP AND MIDSECTION.
- 3. WHEN TWO SECTIONS OF FILTER FABIRC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6"
- 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL SHALL BE REMOVED WHEN SEDIMENT BUILD-UP REACHES 50% OF THE HEIGHT OF THE FILTER FABRIC.
- 5. MAINTENANCE OF SILT FENCE SHALL BE RECORDED TO IN THE











EMBED FILTER

FABRIC

MIN. 6" INTO

GROUND

PERSPECTIVE VIEW

-UV RESISTANT HIGH-TENACITY

(MAX.)

POLYPROPYLENE WOVEN FABRIC

- WOODEN FENCE

 $| (1 \frac{1}{4}" \times 1 \frac{1}{4}" \times 60")|$

SPACED MAXIMUM

PROTECTED

AREA

⊢TOP OF

GROUND

POST STAKES

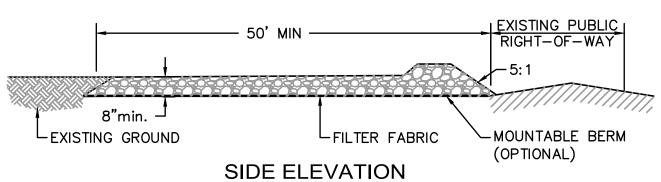
OF 8' O.C.

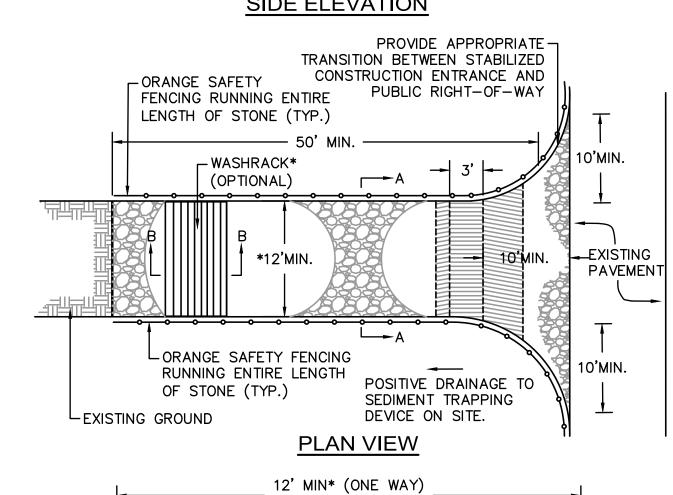
36" MIN.

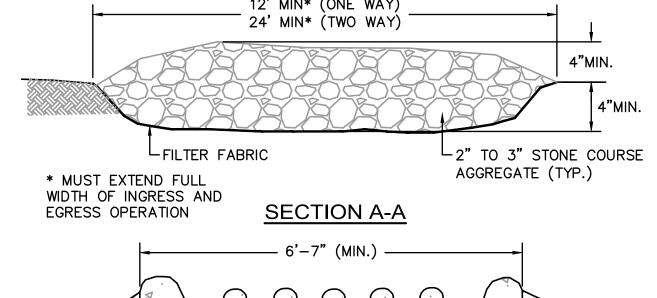
EXPOSED

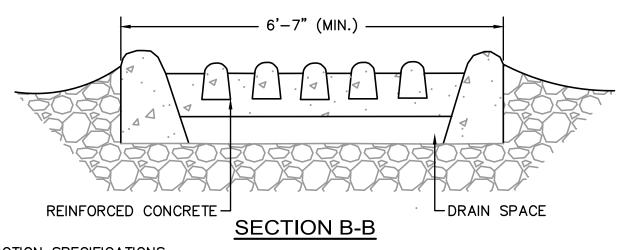
HEIGHT

PERIMETER PROTECTION BARRIER (B) SILT FENCE DETAIL WITH WATTLES NOT TO SCALE







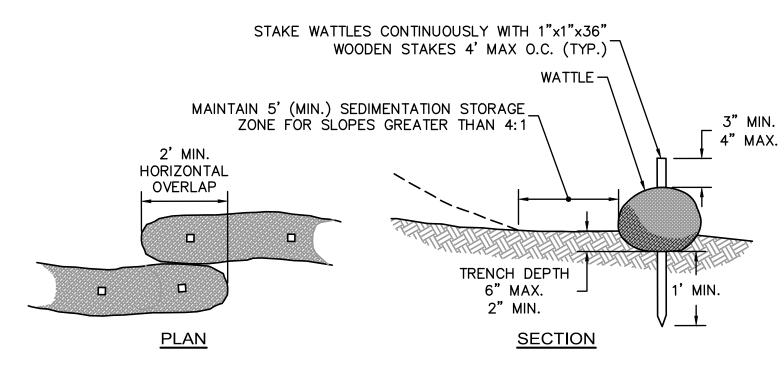


CONSTRUCTION SPECIFICATIONS 1. LENGTH - GREATER THAN OR EQUAL TO 50 FEET 2. WIDTH - TWELVE FOOT MINIMUM (ONE WAY), TWENTY FOUR FOOT MINIMUM (TWO WAY), BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 3. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE

BERM SHALL BE PERMITTED. 4. THICKNESS - 8" MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED,

WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. 6. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED.

STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE



1. ACCEPTABLE TYPES OF WATTLES ARE COIR (COCONUT FIBER), COMPOST, OR STRAW. 2. WATTLES MAY BE USED AS AN EROSION CONTROL BARRIER FOR SLOPES LESS THAN 10:1.

> WATTLES DETAIL NOT TO SCALE

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NITSCH PROJECT #14850 JESSICA L. WALA CIVIL No. 52955

ONTROL

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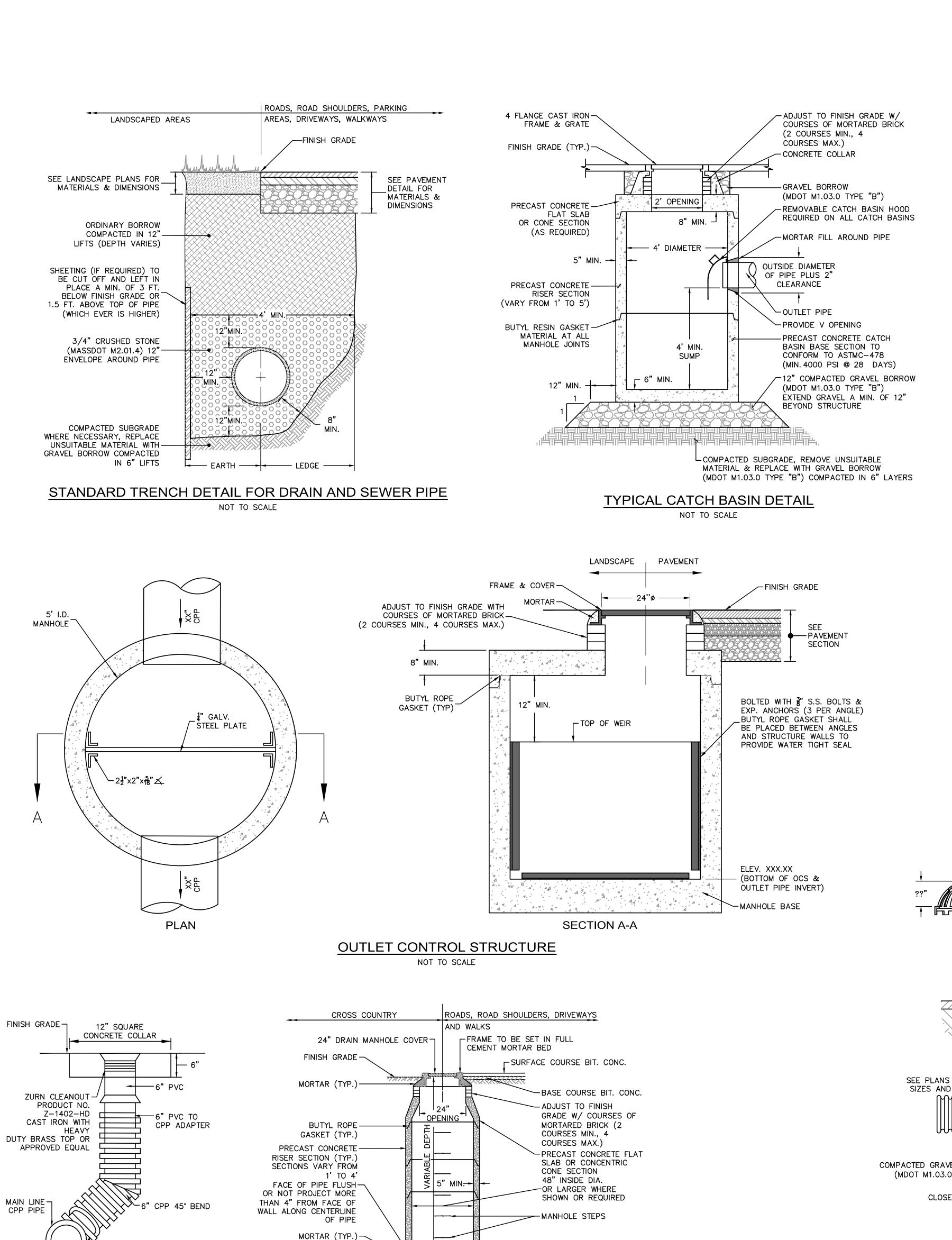
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COMMENTS REVISIONS NITSCH PROJECT # 14850 FILE: 14850-CDT.DWG SCALE: NTS

06/30/2022 PROJECT MANAGER: BFC SURVEYOR: DRAFTED BY: NITSCH KEW CHECKED BY: JLW/BFC

SHEET:

REV.



-DRAINPIPE

-12" MIN. COMPACTED GRAVEL BORROW

(MDOT M1.03.0 TYPE "B")

-UNSUITABLE MATERIAL TO BE

REMOVED AND REPLACED

(MDOT M1.03.0 TYPE "B")

COMPACTED IN 6" LAYERS

W/ GRAVEL BORROW

OUTSIDE DIA. OF

PROVIDE "V"-

OPENING

PRECAST CONCRETE

BASE SECTION

FORMED -

TYPICAL DRAIN MANHOLE DETAIL

NOT TO SCALE

CONCRETE

PIPE +2" CLEARANCE

NOTE TO DESIGNER:

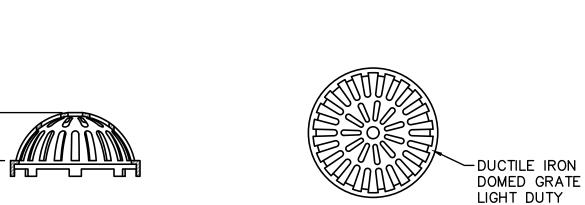
TO BINDER COURSE

FOR ASPHALT PVMT - SET

TOP OF CONCRETE COLLAR

TYPICAL CLEANOUT DETAIL

NOT TO SCALE



CROSS COUNTRY

FINISH GRADE -

MORTAR (TYP.)

BUTYL ROPE -

1' TO 4'

OF PIPE

MORTAR (TYP.)

GASKET (TYP.)

PRECAST CONCRETE -

RISER SECTION (TYP.)

SECTIONS VARY FROM

FACE OF PIPE FLUSH-

OR NOT PROJECT MORE

THAN 4" FROM FACE OF

WALL ALONG CENTERLINE

PROVIDE "V"-

OPENING

PRECAST CONCRETE-

BASE SECTION

TYPICAL SHALLOW DRAIN MANHOLE DETAIL

NOT TO SCALE

OUTSIDE DIA.

PIPE +2" CLEARANCE

24" DRAIN MANHOLE COVER 7

ROADS, ROAD SHOULDERS, DRIVEWAYS

FRAME TO BE SET IN FULL

-SURFACE COURSE

BASE COURSE BIT. CONC.

GRADE W/ COURSES OF

→PRECAST CONCRETE FLAT

SLAB OR CONCENTRIC

SHOWN OR REQUIRED

MANHOLE STEPS IF DEPTH

-FORMED CONCRETE INVERT

(MDOT M1.03.0 TYPE "B")

REMOVED AND REPLACED

(MDOT M1.03.0 TYPE "B")

COMPACTED IN 6" LAYERS

W/ GRAVEL BORROW

-UNSUITABLE MATERIAL TO BE

IS GREATER THAN 10'

∠12" MIN. COMPACTED

GRAVEL BORROW

MORTARED BRICK (2

- ADJUST TO FINISH

COURSES MIN., 4

COURSES MAX.)

CONE SECTION

-DRAIN PIPE

OR LARGER WHERE

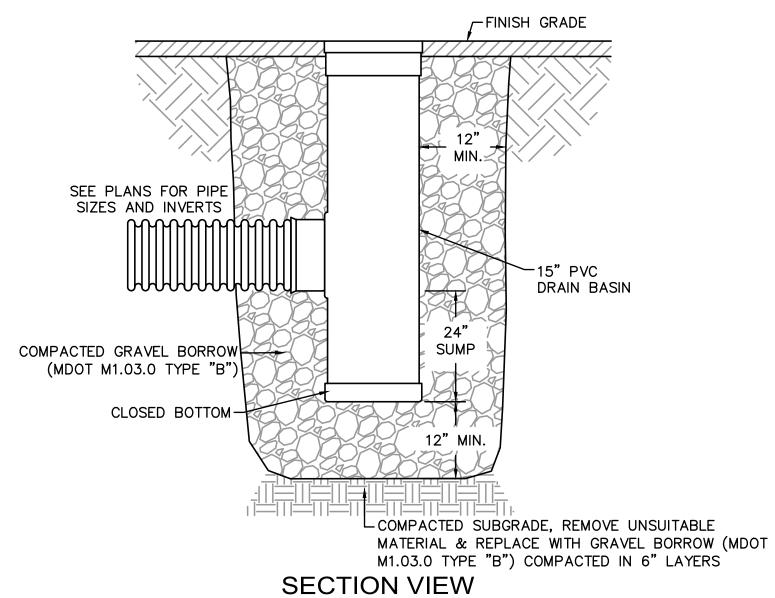
5" MIN. 48" INSIDE DIA.

BIT. CONC.

CEMENT MORTAR BED

AND WALKS

DOMED GRATE



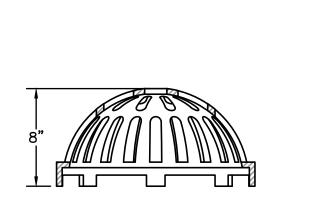
NOTES:

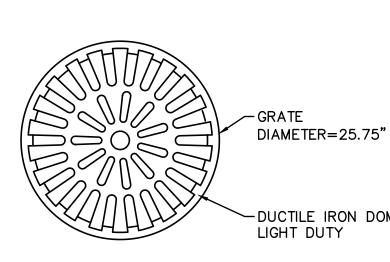
1. FRAME AND GRATE SHALL BE DUCTILE IRON CONFORMING TO ASTM A536 GRADE 70-50-05. 2. 18" AREA DRAINS SHALL BE NYLOPLAST MODEL 2812 AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC., OR APPROVED EQUAL.

3. AREA DRAINS SHALL BE CUSTOM MANUFACTURED ACCORDING TO THE PLANS AND DETAIL.

4. CASTINGS SHALL BE FURNISHED WITH A BLACK PAINT. 5. SEE PLANS FOR LAYOUT AND ELEVATIONS OF DRAIN PIPES TO AREA DRAINS.

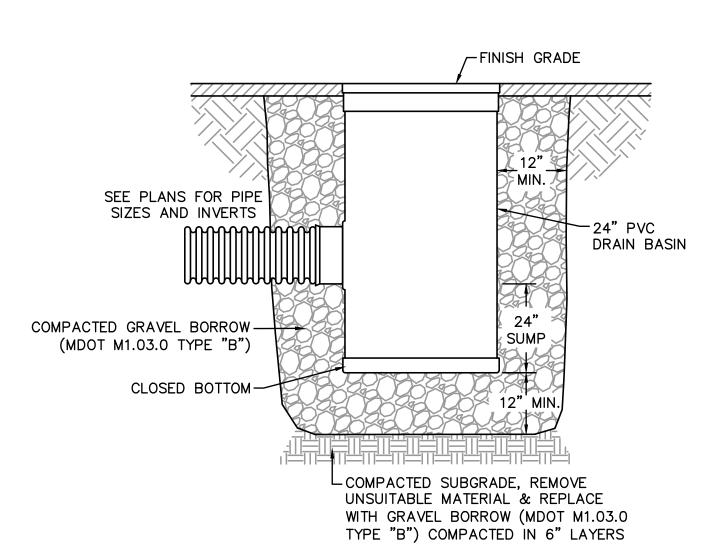
> 15" AREA DRAIN DETAIL NOT TO SCALE





-DUCTILE IRON DOMED GRATE LIGHT DUTY

DOMED GRATE



NOTES:

1. FRAME AND GRATE SHALL BE DUCTILE IRON CONFORMING TO ASTM A536 GRADE 70-50-05.

 2. 24" AREA DRAINS SHALL BE NYLOPLAST MODEL 2824 AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC., OR APPROVED EQUAL.
 3. AREA DRAINS SHALL BE CUSTOM MANUFACTURED ACCORDING TO THE PLANS AND DETAIL. 4. CASTINGS SHALL BE FURNISHED WITH A BLACK PAINT.

5. SEE PLANS FOR LAYOUT AND ELEVATIONS OF DRAIN PIPES TO AREA DRAINS.

SECTION VIEW

24" AREA DRAIN DETAIL NOT TO SCALE

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NITSCH PROJECT #14850 JESSICA L.

> **™** ≥ **EV** **3, NE

COMMENTS REVISIONS

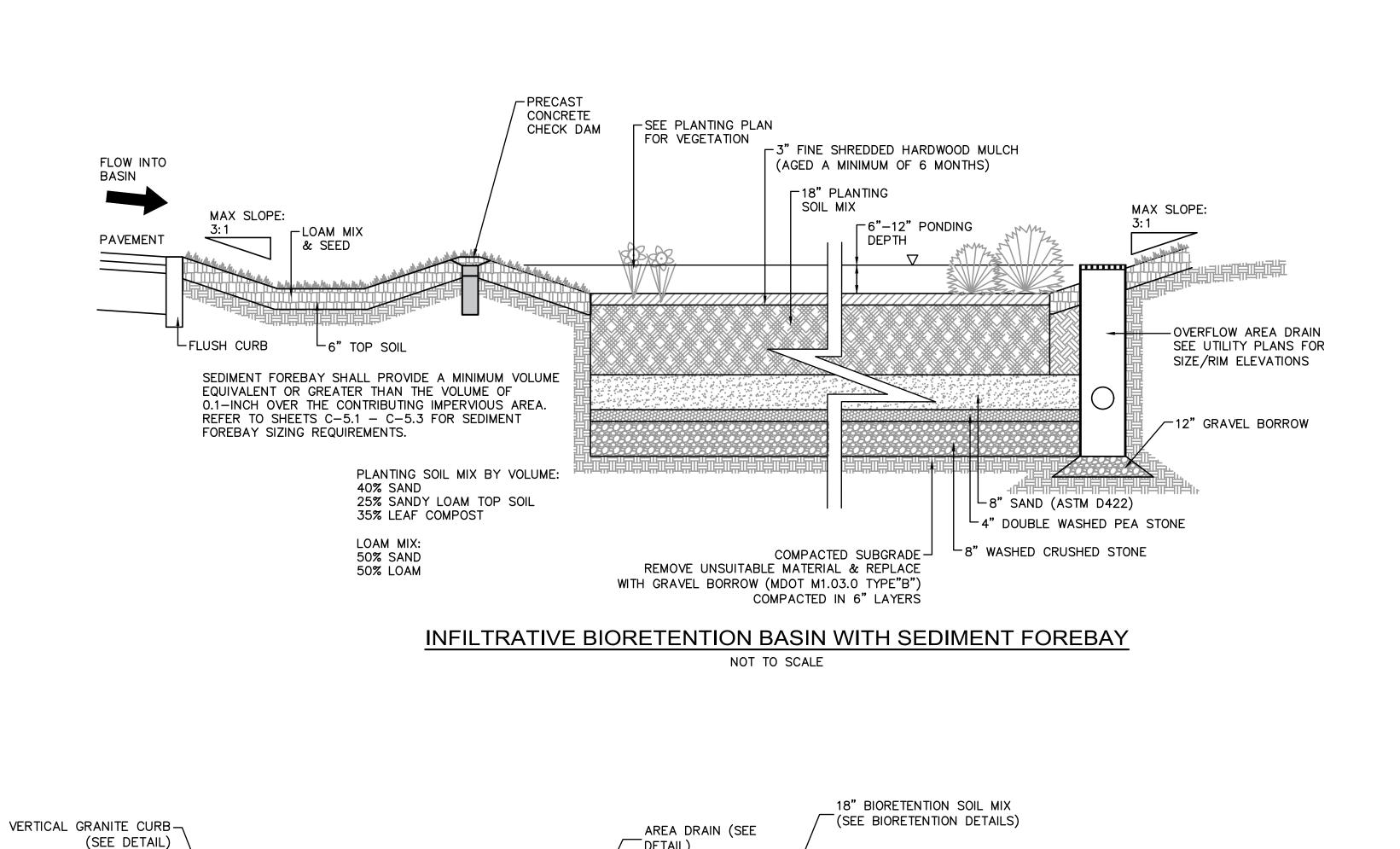
NITSCH PROJECT # 14850 FILE: 14850-CDT.DWG SCALE: NTS 06/30/2022 PROJECT MANAGER: BFC SURVEYOR: DRAFTED BY: NITSCH

KEW

JLW/BFC

CHECKED BY: SHEET:

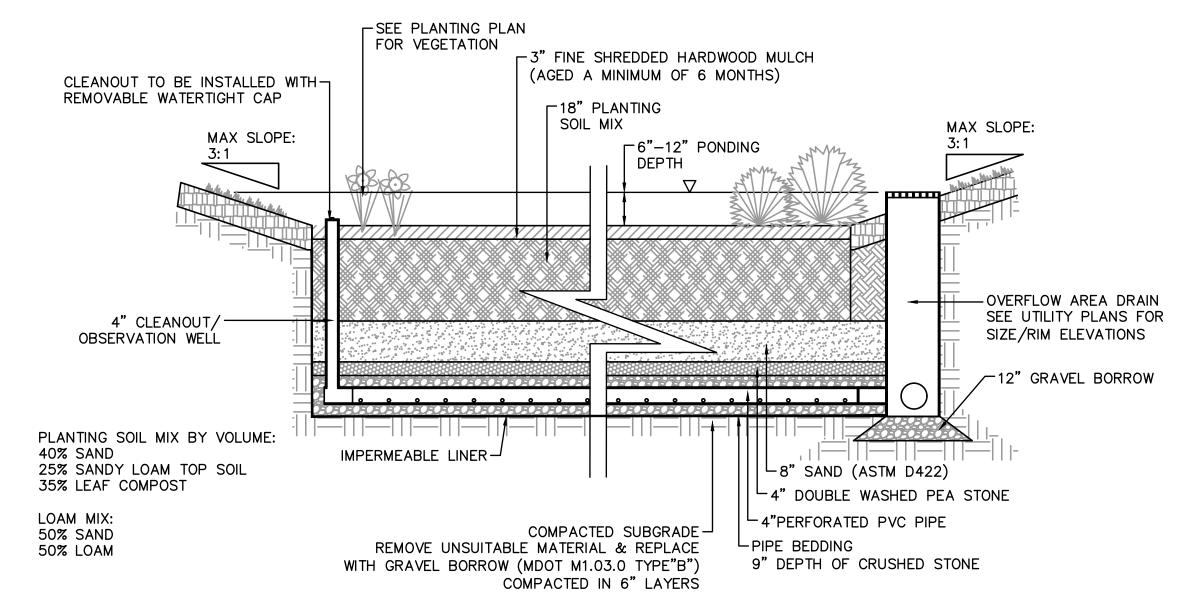
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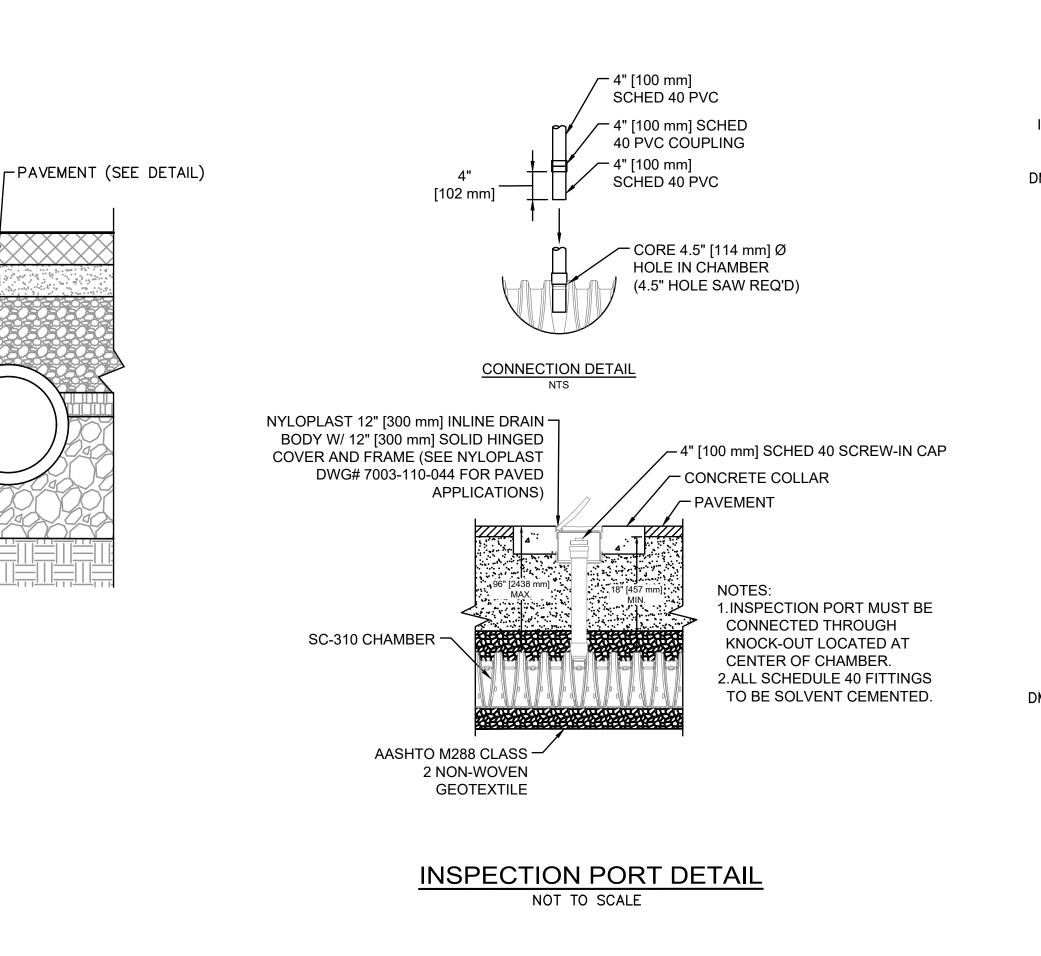
DETAIL)

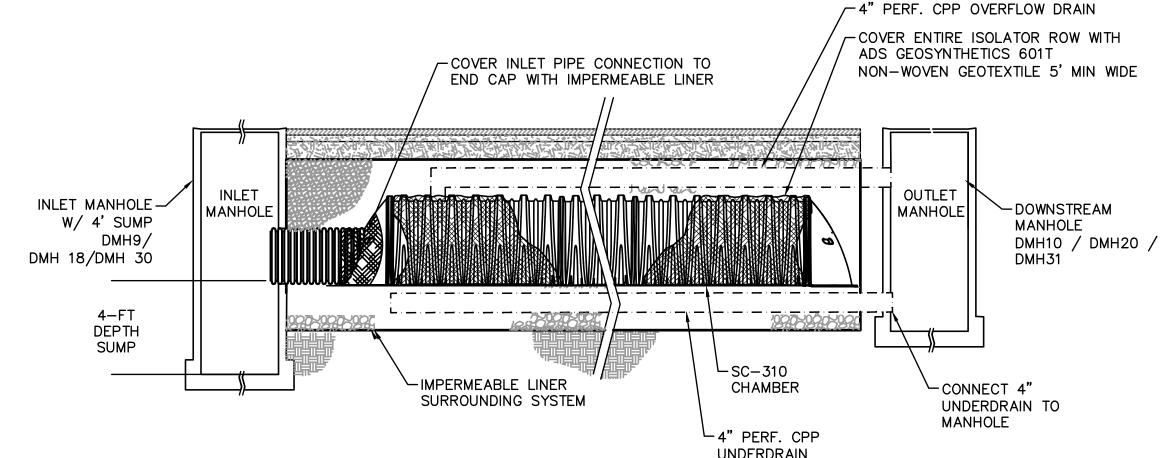
~ VERTICAL GRANITE CURB

FLUSH GRANITE CURB

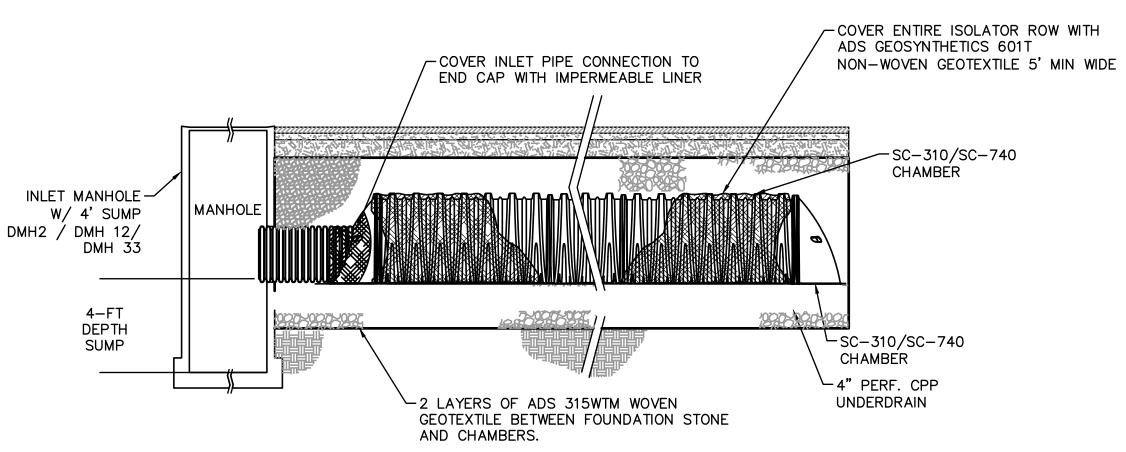


LINED BIORETENTION BASIN W/ UNDERDRAIN NOT TO SCALE



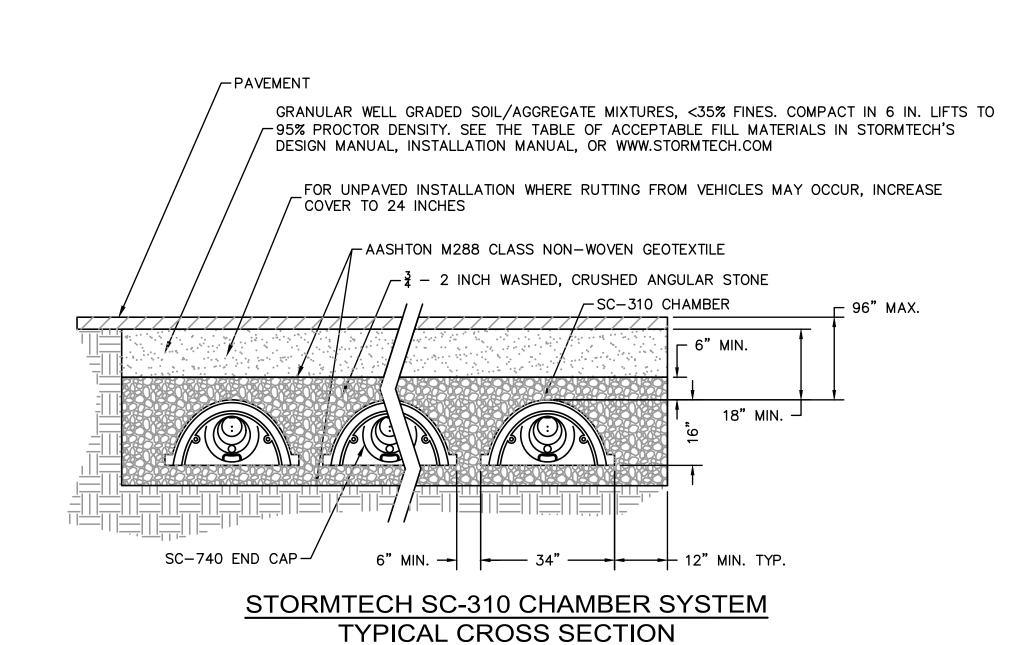


LINED ISOLATOR ROW TREATMENT SYSTEM NOT TO SCALE



ISOLATOR ROW PRETREATMENT (INFILTRATION SYSTEMS #1, #2, #3)

NOT TO SCALE



NOT TO SCALE

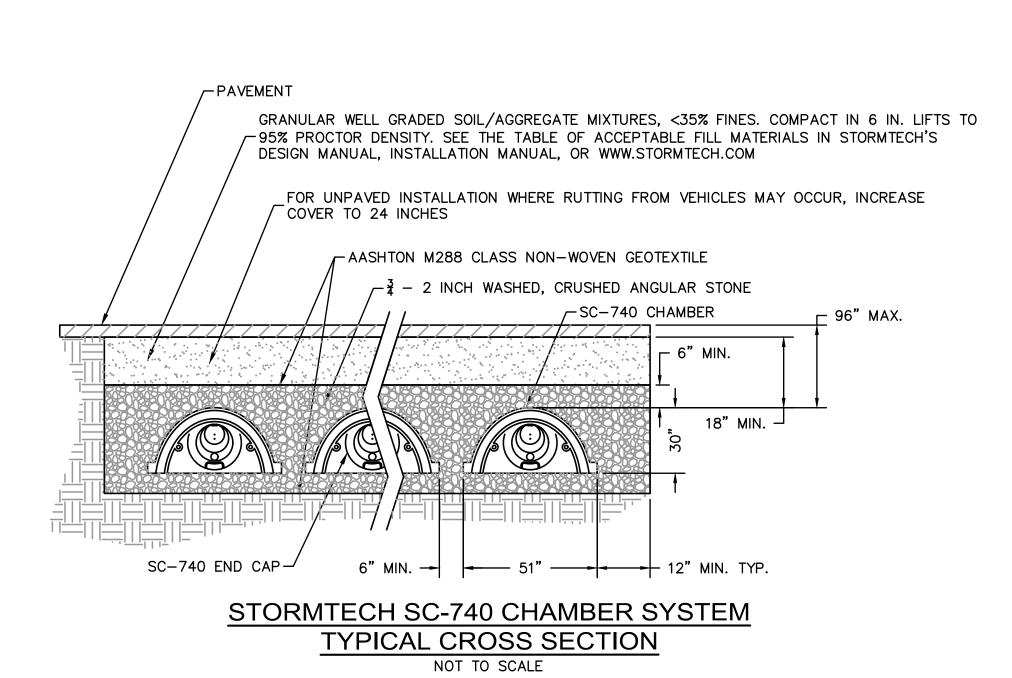
BIORETENTION SECTION THROUGH PARKING LOT ISLAND

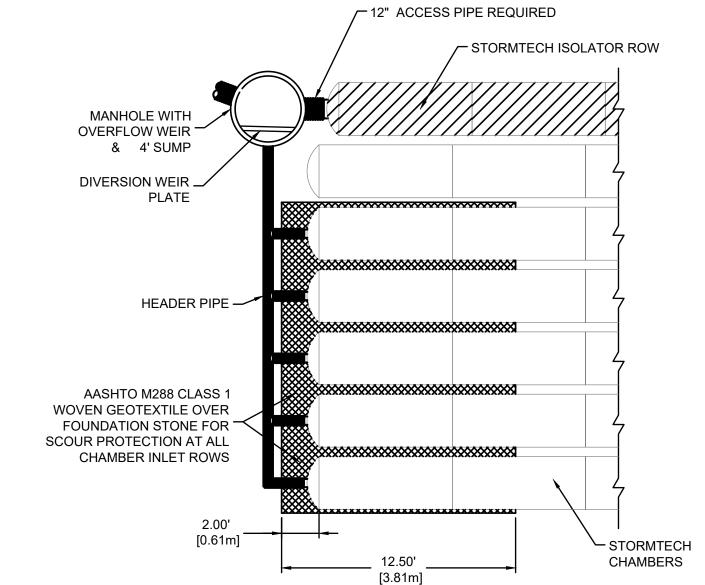
NOT TO SCALE

FLUSH GRANITE CURB-

(SEE DETAIL)

SLOPE: 3:1





- 1. ALL DESIGN SPECIFICATIONS FOR STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE STORMTECH DESIGN MANUAL
- 2. THE INSTALLATION OF STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE LATEST STORMTECH **INSTALLATION INSTRUCTIONS**
- 3. THE CONTRACTOR IS ADVISED TO REVIEW AND UNDERSTAND THE INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION. CALL 1-888-892-2694 OR VISIT WWW.STORMTECH.COM TO RECEIVE A COPY OF THE LATEST STORMTECH INSTALLATION INSTRUCTIONS
- 4. CHAMBERS SHALL MEET THE DESIGN REQUIREMENTS AND LOAD FACTORS SPECIFIED IN SECTION 12.12 OF THE LATEST EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

STORMTECH CHAMBER SYSTEM ISOLATOR ROW AND HEADER PIPE NOT TO SCALE



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SHEE'

SITE

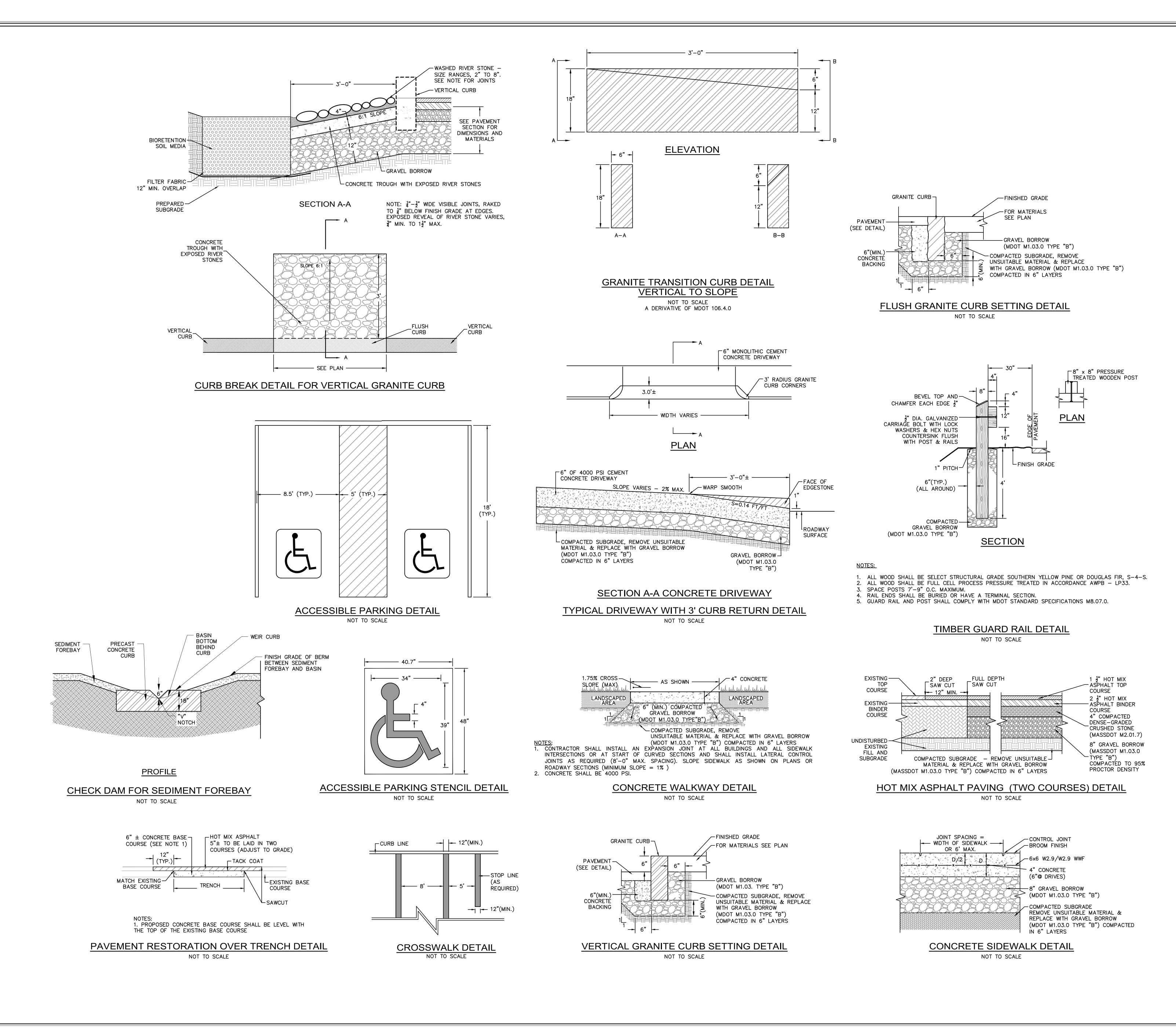
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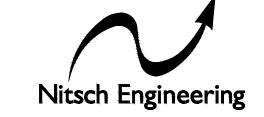
COMMENTS REVISIONS NITSCH PROJECT # 14850

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