

SOURCE: USGS QUADRANGLE MAP 7.5 MINUTE SERIES, GEORGETOWN, MA, DATED 2021

KEY MAP

SCALE: 1" = 1000'±

SITE PLAN FOR **CHASE** PROPOSED BANK WITH DRIVE-THRU ATM



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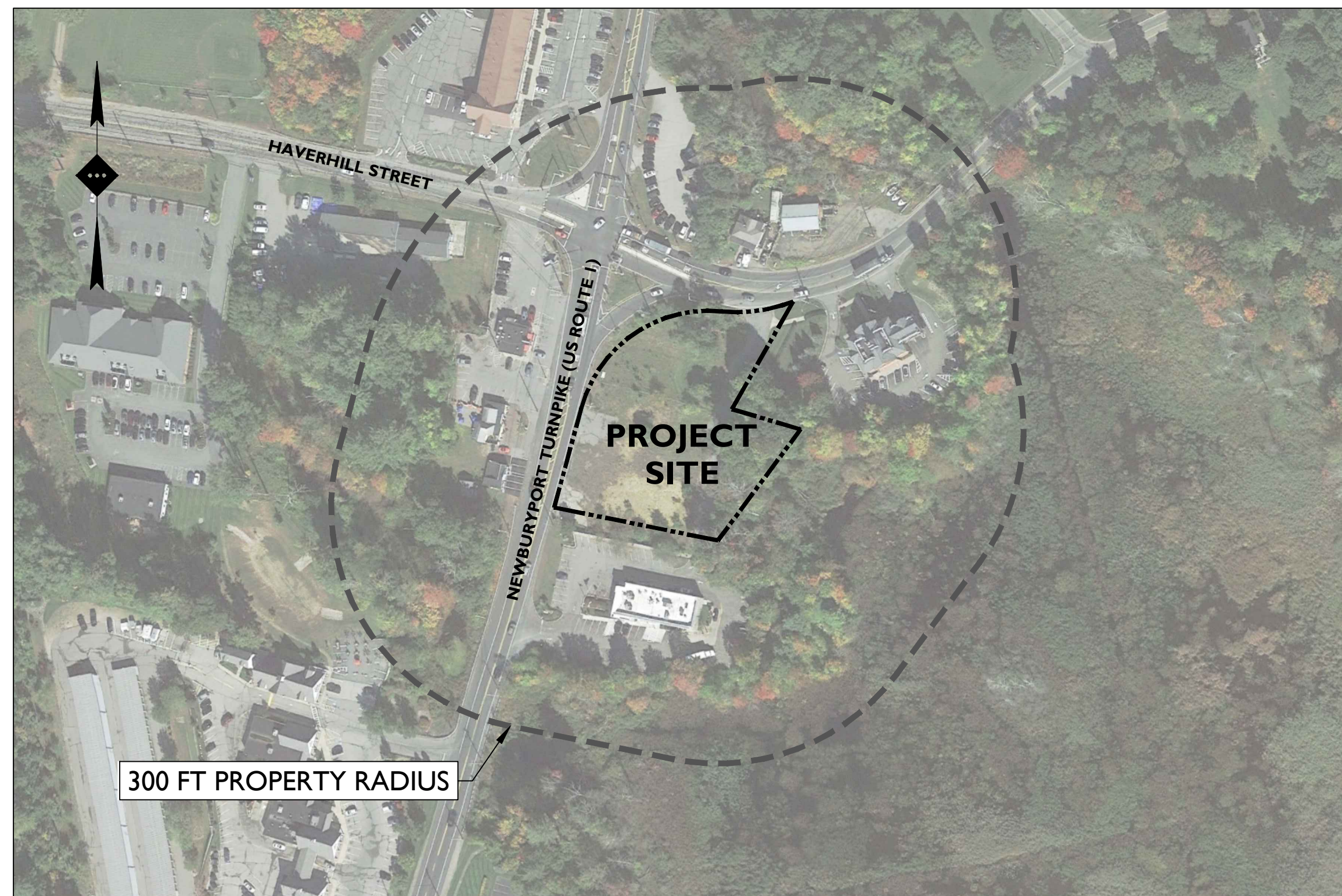
MAP: 14 LOT 13
165 NEWBURYPORT TURNPIKE (US ROUTE 1)
TOWN OF ROWLEY, ESSEX COUNTY, MASSACHUSETTS

APPLICANT

CORE STATES GROUP
C/O STONEFIELD ENGINEERING & DESIGN
120 WASHINGTON STREET, SUITE 201
SALEM, MA 01970
(617) 203-2076
JKLINE@STONEFIELDENG.COM

OWNER

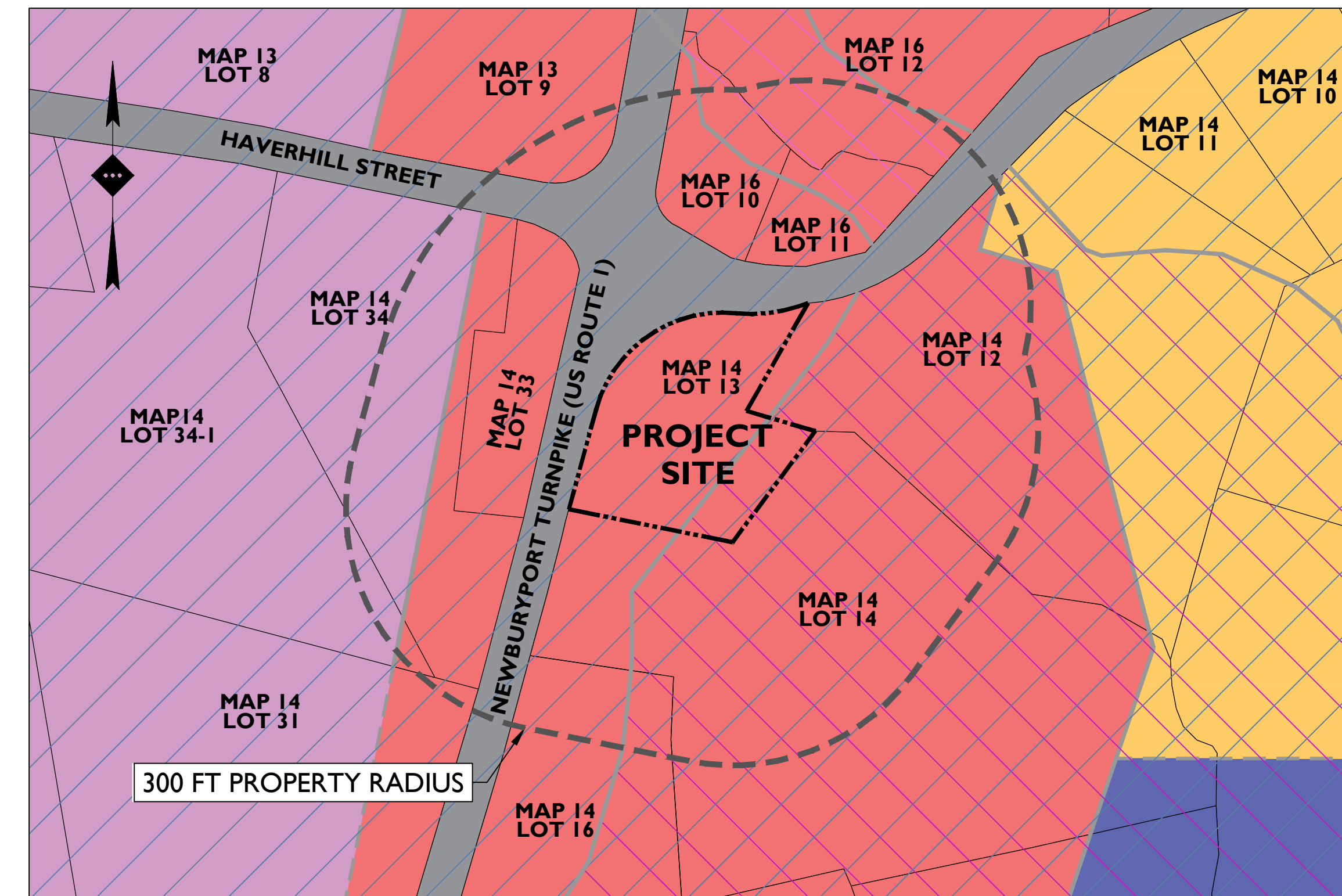
TRS ROUTE 1 REALTY TRUST
415 WEST STREET
W BRIDGEWATER, MA 02379



SOURCE: GOOGLE EARTH PRO, DATED 10/12/2021

AERIAL MAP

SCALE: 1" = 150'±



SOURCE: TOWN OF ROWLEY TAX MAP, DATED 6/14/2023 AND ZONE MAP OF ROWLEY, DATED 6/1/2011

TAX / ZONING MAP

SCALE: 1" = 150'±

PLANS PREPARED BY:



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PLAN REFERENCE MATERIALS:

- THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:
 - BOUNDARY, TOPOGRAPHIC & UTILITY SURVEY BY CONTROL POINT ASSOCIATES, INC. DATED 02/26/2024
 - FEMA MAP OBTAINED FROM FLOOD INSURANCE RATE MAP, ESSEX COUNTY, MASSACHUSETTS, 25009C0258G DATED 02/20/2023
 - AERIAL MAP OBTAINED FROM GOOGLE EARTH PRO, DATED 10/12/21
 - KEY MAP OBTAINED FROM USGS QUADRANGLE MAP 7.5 MINUTE SERIES, GEORGETOWN, MA, DATED 2021
 - TAX MAP OBTAINED FROM TOWN OF ROWLEY, DATED 06/14/2023
 - ZONING MAP OBTAINED FROM ZONE MAP OF ROWLEY, DATED 06/11/2011
 - ROWLEY PROTECTIVE ZONING BYLAW, DATED 05/02/2022
 - ROWLEY PLANNING BOARD RULES AND REGULATIONS, DATED APRIL 2005
 - REPORT OF GEOTECHNICAL INVESTIGATION BY WHITESTONE ASSOCIATES, INC. DATED 11/16/2023
 - ARCHITECTURAL PLAN BY CORE STATES GROUP, DATED 01/15/2024
 - WETLAND REPORT BY DEROSA ENVIRONMENTAL CONSULTING INC. DATED 02/08/2024
 - IMMEDIATE RESPONSE ACTION COMPLETION SITE PLAN PREPARED BY FUSS & O'NEILL DATED 03/28/2013
 - SKETCH PLAN OF LAND PREPARED BY MERIDIAN ASSOCIATES DATED 10/28/2009
- ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

ZONING LEGEND:

	WATER PROTECTION DISTRICT
	FLOODPLAIN DISTRICT
	BUSINESS / LIGHT INDUSTRY DISTRICT
	RETAIL DISTRICT
	RESIDENTIAL DISTRICT
	MAJOR ROAD
	OUTLYING DISTRICT

WAIVER SUMMARY TABLE

CODE SECTION	REQUIRED	PROPOSED
CHAP. 6 SEC. 2.9	PARKING AREA 50 FT LANDSCAPING STRIP	16.4 FT

SHEET INDEX

DRAWING TITLE	SHEET #
COVER SHEET	C-1
EXISTING CONDITIONS PLAN	C-2
DEMOLITION PLAN	C-3
SITE PLAN	C-4
GRADING PLAN	C-5
DRAINAGE AND UTILITY PLAN	C-6
LIGHTING PLAN	C-7 & C-7.1
SOIL EROSION & SEDIMENT CONTROL PLAN	C-8
LANDSCAPING PLAN	C-9 & C-10
CONSTRUCTION DETAILS	C-11 - C-15

NO.	DATE	ISSUE	BY	DESCRIPTION
02	03/29/2024	01	JV	MUNICIPAL SUBMISSION - SIGNAGE
	03/29/2024	01	JV	MUNICIPAL SUBMISSION - SITE PLAN REVIEW

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CHASE
PROPOSED BANK WITH
DRIVE-THRU ATM

MAP: 14 LOT: 13
165 NEWBURYPORT TURNPIKE (US ROUTE 1)
TOWN OF ROWLEY
ESSEX COUNTY, MASSACHUSETTS

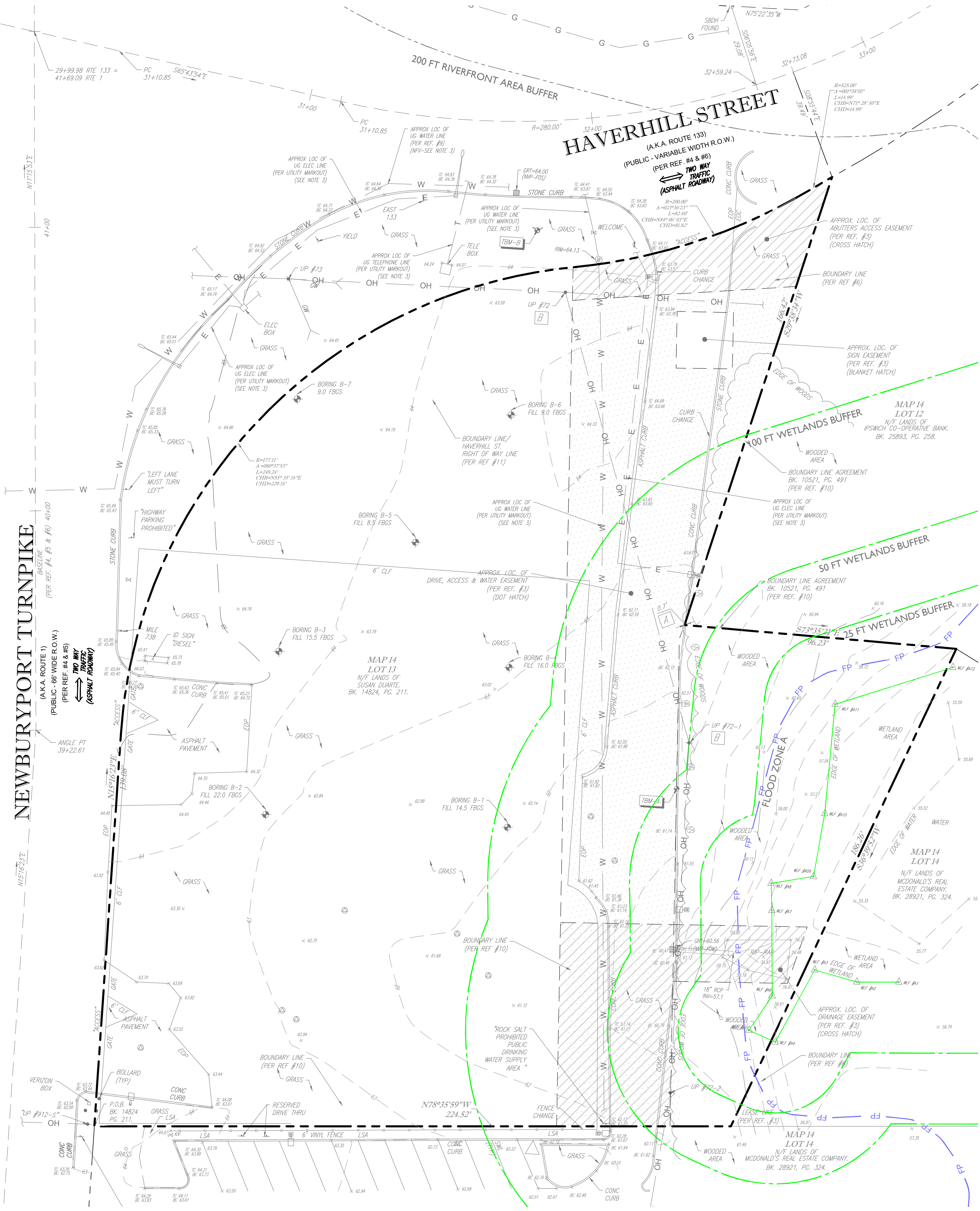
JOSHUA H. KLINE, P.E.
MASSACHUSETTS LICENSE NO. 53936
LICENSED PROFESSIONAL ENGINEER



SCALE: AS SHOWN PROJECT ID: BOS-230034

TITLE:
COVER SHEET

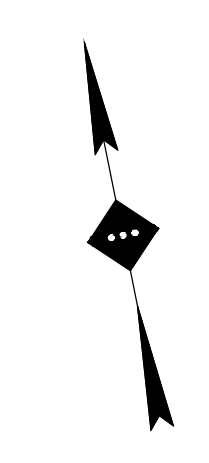
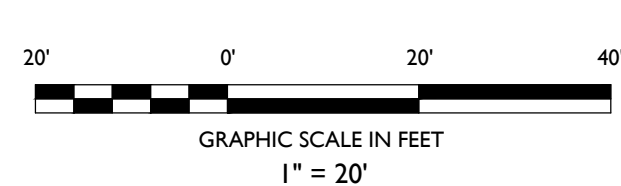
DRAWING:
C-1



SYMBOL	DESCRIPTION
---	EXISTING CONTOUR
— 125 —	EXISTING TOP OF CURB ELEVATION
x BC 123.45	EXISTING BOTTOM OF CURB ELEVATION
OH	OVERHEAD WIRES
G	APPROX. LOC. UNDERGROUND GAS LINE
E	APPROX. LOC. UNDERGROUND ELECTRIC LINE
D	APPROX. LOC. UNDERGROUND DRAINAGE LINE
S	APPROX. LOC. UNDERGROUND SANITARY / SEWER LINE
T	APPROX. LOC. UNDERGROUND TELEPHONE LINE
W	APPROX. LOC. UNDERGROUND WATER LINE
⊕	WATER MANHOLE
⊕	CATCH BASIN
UP	UTILITY POLE
⊕	HYDRANT
GW	GUY WIRE
⊕	STREET LIGHT
⊕	BOLLARD
MW	MONITORING WELL
⊕	SIGN
⊕	AREA LIGHT
⊕	PARKING SPACE COUNT
SWL	SOLID WHITE LINE
EOP	EDGE OF PAVEMENT
UG	UNDER GROUND
LSA	LANDSCAPED AREA
CC	CONCRETE CURB
FOS	FULL OF SEDIMENT
(TYP)	TYPICAL
1.0'	OFFSET OF STRUCTURE AT GROUND LEVEL RELATIVE TO PROPERTY LINE
-04	SUBSURFACE UTILITY QUALITY LEVEL B
-06	SUBSURFACE UTILITY QUALITY LEVEL D
NVP	NO VISIBLE PIPE
FOW	FULL OF WATER

SURVEY NOTES:

1. THE SURVEY LISTED WITHIN THE PLAN REFERENCES ON THE COVER SHEET SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THE SURVEY AND ASSOCIATED DOCUMENTS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF THE SURVEY AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.



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02	03/29/2024	01	JV	MUNICIPAL RESUBMISSION - SIGNAGE
			JV	MUNICIPAL SUBMISSION - SITE PLAN REVIEW

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SITE PLAN

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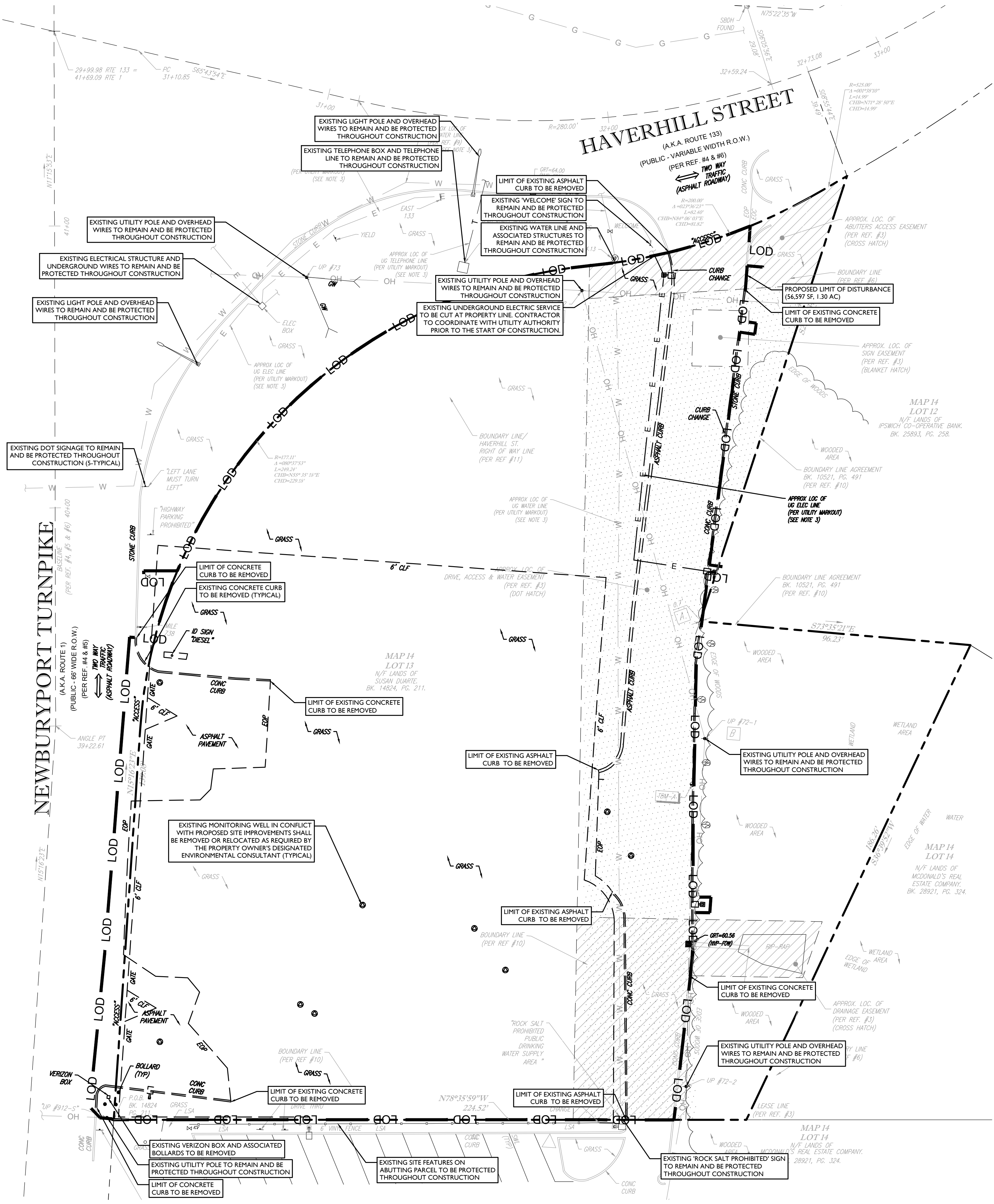
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LICENSED PROFESSIONAL ENGINEER

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SCALE: 1" = 20' PROJECT ID: BOS-230034

TITLE:
**EXISTING CONDITIONS
PLAN**

DRAWING:
C-2



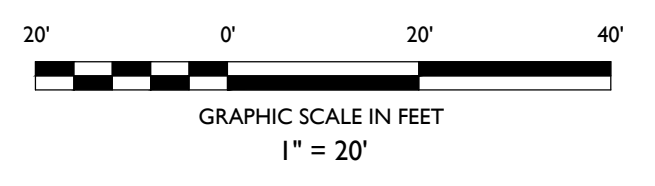
SYMBOL	DESCRIPTION
---	FEATURE TO BE REMOVED / DEMOLISHED
---	LOD
---	LIMIT OF DISTURBANCE

ALL SITE FEATURES WITHIN THE LIMIT OF DISTURBANCE INDICATED ON THIS PLAN ARE TO BE REMOVED / DEMOLISHED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF SIGNIFICANT DISCREPANCIES ARE DISCERNED BETWEEN THIS PLAN AND FIELD CONDITIONS

- DEMOLITION NOTES**
1. THE WORK REFLECTED ON THE DEMOLITION PLAN IS TO PROVIDE GENERAL INFORMATION TOWARDS THE EXISTING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR IS RESPONSIBLE TO REVIEW THE ENTIRE PLAN SET AND ASSOCIATED REPORTS/REFERENCE DOCUMENTS INCLUDING ALL DEMOLITION ACTIVITIES AND INCIDENTAL TASKS NECESSARY TO COMPLETE THE SITE IMPROVEMENTS.
 2. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF DEMOLITION ACTIVITIES.
 3. EXPLOSIVES SHALL NOT BE USED UNLESS WRITTEN CONSENT FROM BOTH THE OWNER AND ANY APPLICABLE GOVERNING AGENCY IS OBTAINED. BEFORE THE START OF ANY EXPLOSIVE PROGRAM, THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL LOCAL STATE AND FEDERAL PERMITS. ADDITIONALLY, THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL SEISMIC TESTING AS REQUIRED AND ANY DAMAGES AS THE RESULT OF SAID DEMOLITION PRACTICES.
 4. ALL DEMOLITION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL STATE AND FEDERAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL UTILITIES ARE DISCONNECTED IN ACCORDANCE WITH THE UTILITY AUTHORITY'S REQUIREMENTS PRIOR TO STARTING THE DEMOLITION OF ANY STRUCTURE. ALL EXCAVATIONS ASSOCIATED WITH DEMOLISHED STRUCTURES OR REMOVED TANKS SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO SUPPORT SITE AND BUILDING IMPROVEMENTS. A GEOTECHNICAL ENGINEER SHOULD BE PRESENT DURING BACKFILLING ACTIVITIES TO OBSERVE AND CERTIFY THAT BACKFILL MATERIAL WAS COMPACTED TO A SUITABLE CONDITION.
 5. DEMOLISHED DEBRIS SHALL NOT BE BURIED ON SITE. ALL WASTE/DEBRIS GENERATED FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL STATE AND FEDERAL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL RECORDS OF THE DISPOSAL TO DEMONSTRATE COMPLIANCE WITH THE ABOVE REGULATIONS.



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01	03/08/2024	IV	JV	MUNICIPAL SUBMISSION - SITE PLAN REVIEW

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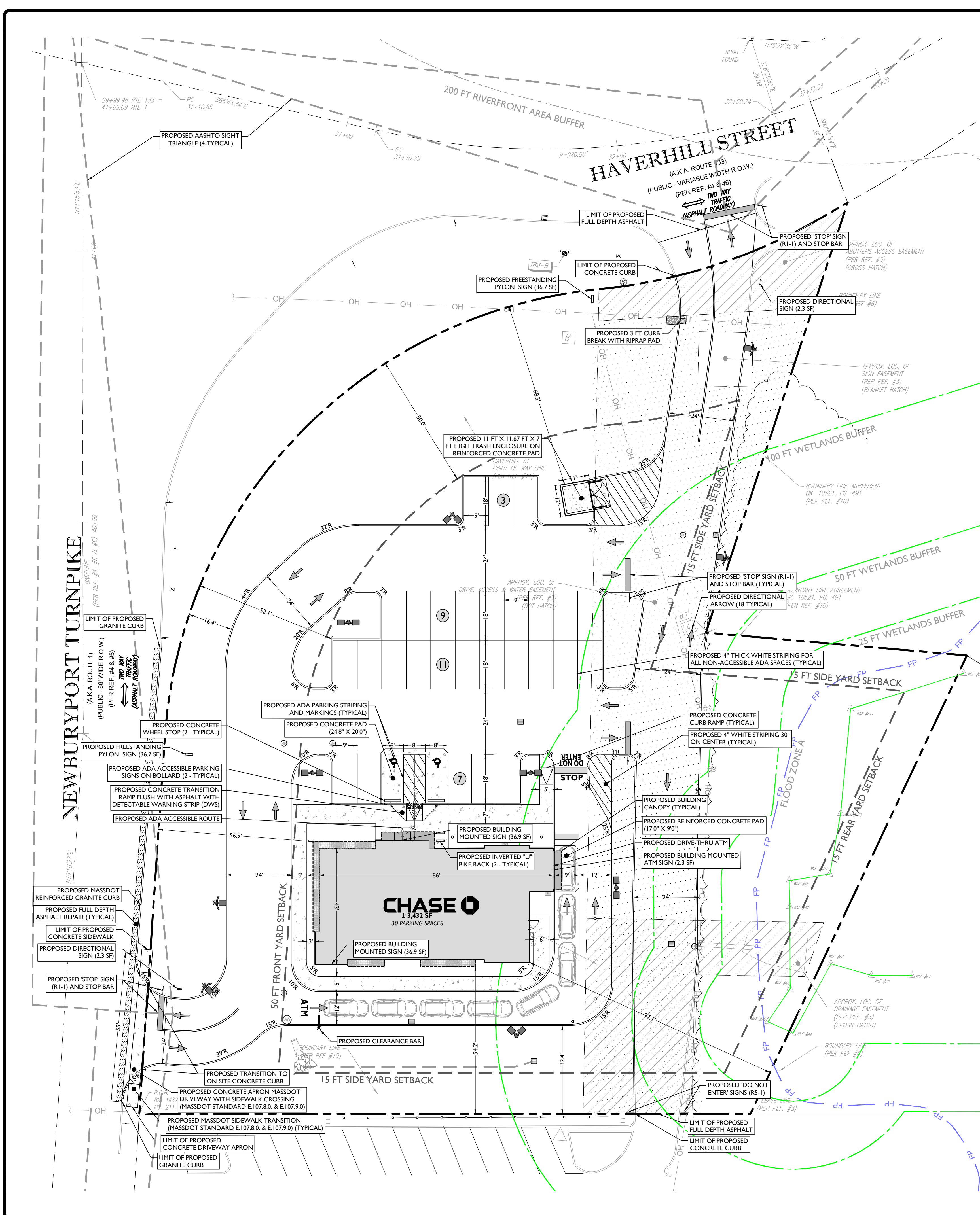
SCALE: 1" = 20' PROJECT ID: BOS-230034

TITLE:
DEMOLITION PLAN

DRAWING:

C-3

Z:\PROJECTS\2023\BOS230034\CONSTR\165 NEWBURYPORT TURNPIKE ROWLEY MA\CAD\DWG\TOP\165.DWG



LAND USE AND ZONING			
BLOCK 14, LOT 13			
RETAIL DISTRICT - FLOODPLAIN DISTRICT - WATER PROTECTION DISTRICT - GROUNDWATER PROTECTION AREA ZONE II			
PROPOSED USE	BANK	SPECIAL PERMIT *	
	DRIVE-THRU FACILITIES	SPECIAL PERMIT	
ZONING REQUIREMENT	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	(N/S)	67,765 SF (1.56 AC)	NO CHANGE
MINIMUM LOT FRONTAGE	(N/S)	485.7 SF	NO CHANGE
MINIMUM LOT WIDTH (AT FRONT SETBACK)		100 FT	NO CHANGE
MINIMUM LOT WIDTH		40 FT	NO CHANGE
MINIMUM LOT PERIMETER		1,711.2 FT **	NO CHANGE
MINIMUM FRONT YARD SETBACK		50 FT ***	± 25 FT
MINIMUM SIDE YARD SETBACK		15 FT	± 68.5 FT
MINIMUM REAR YARD SETBACK		15 FT	± 162.0 FT
MAXIMUM BUILDING LOT COVERAGE		25% (16,941 SF)	3.5% (2,380 SF)
MAXIMUM LOT COVERAGE		50% (33,882 SF)	55.8% (37,850 SF)
MAXIMUM BUILDING HEIGHT		35 FT	1 STORY

(N/S) NOT SPECIFIED
 (EN) EXISTING NON-CONFORMITY
 * ALL PROPOSED USES IN FLOODPLAIN DISTRICT MUST BE GRANTED SPECIAL PERMIT APPROVAL
 ** MINIMUM LOT PERIMETER CALCULATED AS FOLLOWS: 1 FT LOT PERIMETER PER 39.6 SF OF LOT AREA
 *** FOR BUILDING FACADES 150 FT AND LESS IN LENGTH, FRONT SETBACK = 50 FT

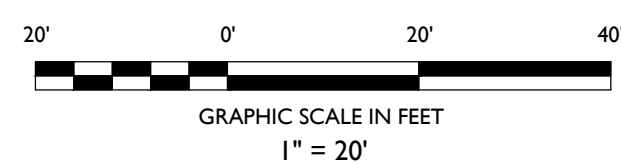
PARKING REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
TABLE OF REQUIRED OFF-STREET PARKING SPACES	REQUIRED PARKING SPACES (SERVICE ESTABLISHMENT):	
	ONE SPACE PER 200 SF OF FLOOR AREA (3,432 SF / 200 SF) = 17 SPACES	30 SPACES
§ 6.1.3.2.3 (b)	MINIMUM PARKING SETBACK REQUIREMENTS:	
	50 FT FROM STREET LINE	50 FT

SIGNAGE REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 8.4.5.1	RETAIL DISTRICT SIGN REQUIREMENTS:	
	MAXIMUM WALL SIGN AREA: 10 SF	36.9 SF (V)
	MAXIMUM FREESTANDING SIGN AREA: 80 SF	57.7 SF
	MAXIMUM TOTAL SIGN AREA: 5% OF VERTICAL WALL AREA FACING STREET (0.05 * 21.5 FT * 86 FT) = 0.05 * 21.5 FT * 43 = 139 SF	151.4 SF (V)
§ 8.4.5.2	SIGN SIZING REQUIREMENTS:	
	MAXIMUM VERTICAL LENGTH: 15 FT	13.6 FT
	MAXIMUM HORIZONTAL LENGTH: 15 FT	14 FT
§ 8.4.5.3	MAXIMUM SIGN MOUNTING HEIGHT: 20 FT	18.5 FT

(V) VARIANCE

SYMBOL	DESCRIPTION
---	PROPERTY LINE
---	SETBACK LINE
---	SAWCUT LINE
---	PROPOSED CURB
---	PROPOSED FLUSH OPENING
---	PROPOSED SIGNS
---	PROPOSED BUILDING
---	PROPOSED CONCRETE
---	PROPOSED AREA LIGHT
---	PROPOSED BUILDING DOORS

- GENERAL NOTES**
- THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC PRIOR TO THE START OF CONSTRUCTION.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
 - ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC, AND ITS SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
 - THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
 - THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
 - THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTOR'S EXPENSE.
 - CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
 - THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 - THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROMPT RESTORATION OF STREET OPENING PERMITS.
 - THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
 - SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC, BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.



MUNICIPAL RESUBMISSION - SIGNAGE		DATE	BY
02	03/29/2024		
MUNICIPAL SUBMISSION - SITE PLAN REVIEW		ISSUE	
01	03/29/2024		

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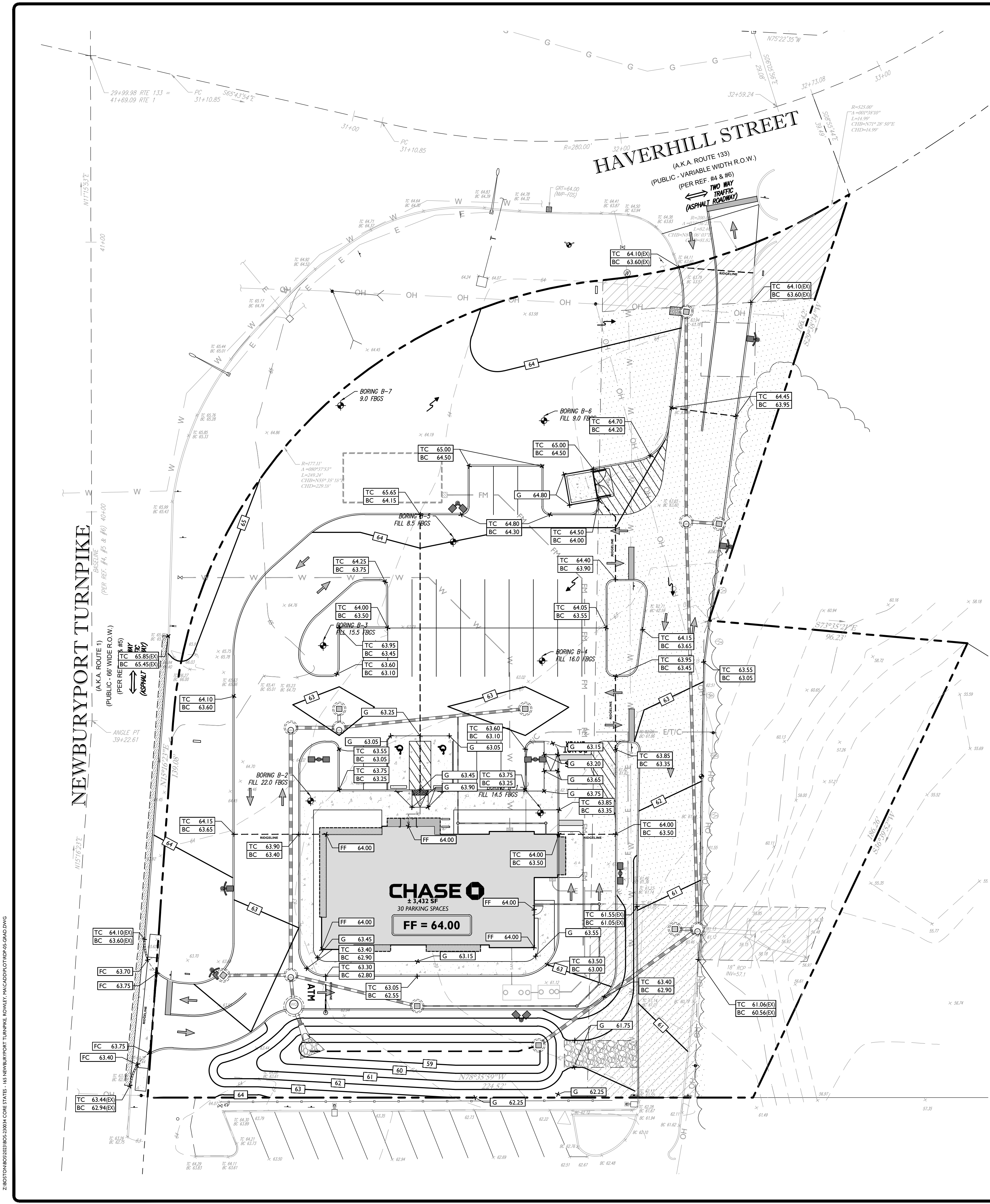
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SCALE: 1" = 20' PROJECT ID: BOS-230034

TITLE: **SITE PLAN**

DRAWING: **C-4**



THE CONTRACTOR SHALL START CONSTRUCTION OF ALL GRAVITY SANITARY AND STORMWATER INFRASTRUCTURE AT THE DOWNSTREAM CONNECTION POINT (E.G. LOWEST INVERT) AND WORK UP-GRADE.

PRIOR TO THE START OF CONSTRUCTION (RECOMMENDED 30 DAYS PRIOR) THE CONTRACTOR SHALL PERFORM EXPLORATORY TEST PITS AT LOCATIONS OF UTILITY / DRAINAGE CROSSINGS OR CONNECTIONS WITH EXISTING UTILITY OR STORMWATER INFRASTRUCTURE. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ANY NECESSARY ROAD OPENING PERMITS TO PERFORM SAID EXPLORATORY WORK. SHOULD A CONFLICT BE DISCOVERED WITH THE INFORMATION CONTAINED WITHIN THESE PLANS THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.

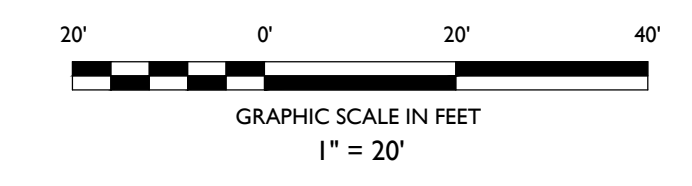
SYMBOL	DESCRIPTION
---	PROPERTY LINE
---	PROPOSED GRADING CONTOUR
---	PROPOSED GRADING RIDGELINE
---	PROPOSED DIRECTION OF DRAINAGE FLOW
X G 100.00	PROPOSED GRADE SPOT SHOT
X TC 100.50 BC 100.00	PROPOSED TOP OF CURB / BOTTOM OF CURB SPOT SHOT
X FC 100.00	PROPOSED FLUSH CURB SPOT SHOT
X DC 100.12 BC 100.00	PROPOSED DEPRESSED CURB / BOTTOM OF CURB SPOT SHOT
X TW 102.00 BW 100.00	PROPOSED TOP OF WALL / BOTTOM OF WALL SPOT SHOT
[Symbol]	PROPOSED STORMWATER STRUCTURES
[Symbol]	PROPOSED STORMWATER PIPING

GRADING NOTES

- ALL SOIL AND MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. ANY GROUNDWATER DE-WATERING PRACTICES SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE DISCHARGE OF DE-WATERED GROUNDWATER. ALL SOIL IMPORTED TO THE SITE SHALL BE CERTIFIED CLEAN FILL. CONTRACTOR SHALL MAINTAIN RECORDS OF ALL FILL MATERIALS BROUGHT TO THE SITE. THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY AND/OR PERMANENT SHORING WHERE REQUIRED DURING EXCAVATION ACTIVITIES, INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES, TO ENSURE THE STRUCTURAL INTEGRITY OF NEARBY STRUCTURES AND STABILITY OF THE SURROUNDING SOILS.
- PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 4 INCHES TO 7 INCHES ABOVE EXISTING GRADES UNLESS OTHERWISE NOTED. THE CONTRACTOR WILL SUPPLY ALL STAKEOUT CURB GRADE SHEETS TO STONEFIELD ENGINEERING & DESIGN, LLC. FOR REVIEW AND APPROVAL PRIOR TO POURING CURBS.
- THE CONTRACTOR IS RESPONSIBLE TO SET ALL PROPOSED UTILITY COVERS AND RESET ALL EXISTING UTILITY COVERS WITHIN THE PROJECT LIMITS TO PROPOSED GRADE IN ACCORDANCE WITH ANY APPLICABLE MUNICIPAL, COUNTY, STATE AND/OR UTILITY AUTHORITY REGULATIONS.
- MINIMUM SLOPE REQUIREMENTS TO PREVENT PONDING SHALL BE AS FOLLOWS:
 - CURB GUTTER: 0.50%
 - CONCRETE SURFACES: 1.00%
 - ASPHALT SURFACES: 1.00%
- A MINIMUM SLOPE OF 1.00% SHALL BE PROVIDED AWAY FROM ALL BUILDINGS. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FROM THE BUILDING IS ACHIEVED AND SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF THIS CONDITION CANNOT BE MET.
- FOR PROJECTS WHERE BASEMENTS ARE PROPOSED, THE DEVELOPER IS RESPONSIBLE TO DETERMINE THE DEPTH TO GROUNDWATER AT THE LOCATION OF THE PROPOSED STRUCTURE. IF GROUNDWATER IS ENCOUNTERED WITHIN THE BASEMENT AREA, SPECIAL CONSTRUCTION METHODS SHALL BE UTILIZED AND REVIEWED/APPROVED BY THE CONSTRUCTION CODE OFFICIAL. IF PUMP PUMPS ARE UTILIZED, ALL DISCHARGES SHALL BE CONNECTED DIRECTLY TO THE PUBLIC STORM SEWER SYSTEM WITH APPROVAL FROM THE GOVERNING STORM SEWER SYSTEM AUTHORITY.

ADA NOTES

- THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION WITHIN THE ADA PARKING SPACES AND ACCESS ASLES.
- THE CONTRACTOR SHALL PROVIDE COMPLIANT SIGNAGE AT ALL ADA PARKING AREAS IN ACCORDANCE WITH STATE GUIDELINES.
- THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 5.00% RUNNING SLOPE AND A MAXIMUM OF 2.00% CROSS SLOPE ALONG WALKWAYS WITHIN THE ACCESSIBLE PATH OF TRAVEL (SEE THE SITE PLAN FOR THE LOCATION OF THE ACCESSIBLE PATH). THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE ACCESSIBLE PATH OF TRAVEL IS 36 INCHES WIDE OR GREATER UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
- THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION AT ALL LANDINGS. LANDINGS INCLUDE, BUT ARE NOT LIMITED TO, THE TOP AND BOTTOM OF AN ACCESSIBLE RAMP; AT ACCESSIBLE BUILDING ENTRANCES; AT AN AREA IN FRONT OF A WALK-UP ATM; AND AT TURNING SPACES ALONG THE ACCESSIBLE PATH OF TRAVEL. THE LANDING AREA SHALL HAVE A MINIMUM CLEAR AREA OF 60 INCHES BY 60 INCHES UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
- THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 8.33% RUNNING SLOPE AND A MAXIMUM 2.00% CROSS SLOPE ON ANY CURB RAMPS ALONG THE ACCESSIBLE PATH OF TRAVEL. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 10.00% IF A LANDING AREA IS PROVIDED AT THE TOP OF THE RAMP; FOR ALTERATIONS, A CURB RAMP FLARE SHALL NOT HAVE A SLOPE GREATER THAN 8.33% IF A LANDING AREA IS NOT PROVIDED AT THE TOP OF THE RAMP. CURB RAMPS SHALL NOT RISE MORE THAN 6 INCHES IN ELEVATION WITHOUT A HANDRAIL. THE CLEAR WIDTH OF A CURB RAMP SHALL BE NO LESS THAN 36 INCHES WIDE.
- ACCESSIBLE RAMPS WITH A RISE GREATER THAN 6 INCHES SHALL CONTAIN COMPLIANT HANDRAILS ON BOTH SIDES OF THE RAMP AND SHALL NOT RISE MORE THAN 30" IN ELEVATION WITHOUT A LANDING AREA IN BETWEEN RAMP RUNS. LANDING AREAS SHALL ALSO BE PROVIDED AT THE TOP AND BOTTOM OF THE RAMP.
- A SLIP RESISTANT SURFACE SHALL BE CONSTRUCTED ALONG THE ACCESSIBLE PATH AND WITHIN ADA PARKING AREAS.
- THE CONTRACTOR SHALL ENSURE A MAXIMUM OF 1/4" INCHES VERTICAL CHANGE IN LEVEL ALONG THE ACCESSIBLE PATH. WHERE A CHANGE IN LEVEL BETWEEN 1/4" INCHES AND 1/2" INCHES EXISTS, CONTRACTOR SHALL ENSURE THAT THE TOP 1/2" INCH CHANGE IN LEVEL IS REVEALED WITH A SLOPE NOT STEEPER THAN 1 UNIT VERTICAL AND 2 UNITS HORIZONTAL (2:1 SLOPE).
- THE CONTRACTOR SHALL ENSURE THAT ANY OPENINGS (GAPS OR HORIZONTAL SEPARATION) ALONG THE ACCESSIBLE PATH SHALL NOT ALLOW PASSAGE OF A SPHERE GREATER THAN 1/2" INCH.



NO.	DATE	ISSUE	BY	DESCRIPTION
02	03/29/2024	JV		MUNICIPAL RESUBMISSION - SIGNAGE
01	03/08/2024	JV		MUNICIPAL SUBMISSION - SITE PLAN REVIEW

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CHASE
PROPOSED BANK WITH
DRIVE-THRU ATM

MAP: 14 LOT: 13
165 NEWBURYPORT TURNPIKE (US ROUTE 1)
TOWN OF ROWLEY
ESSEX COUNTY, MASSACHUSETTS

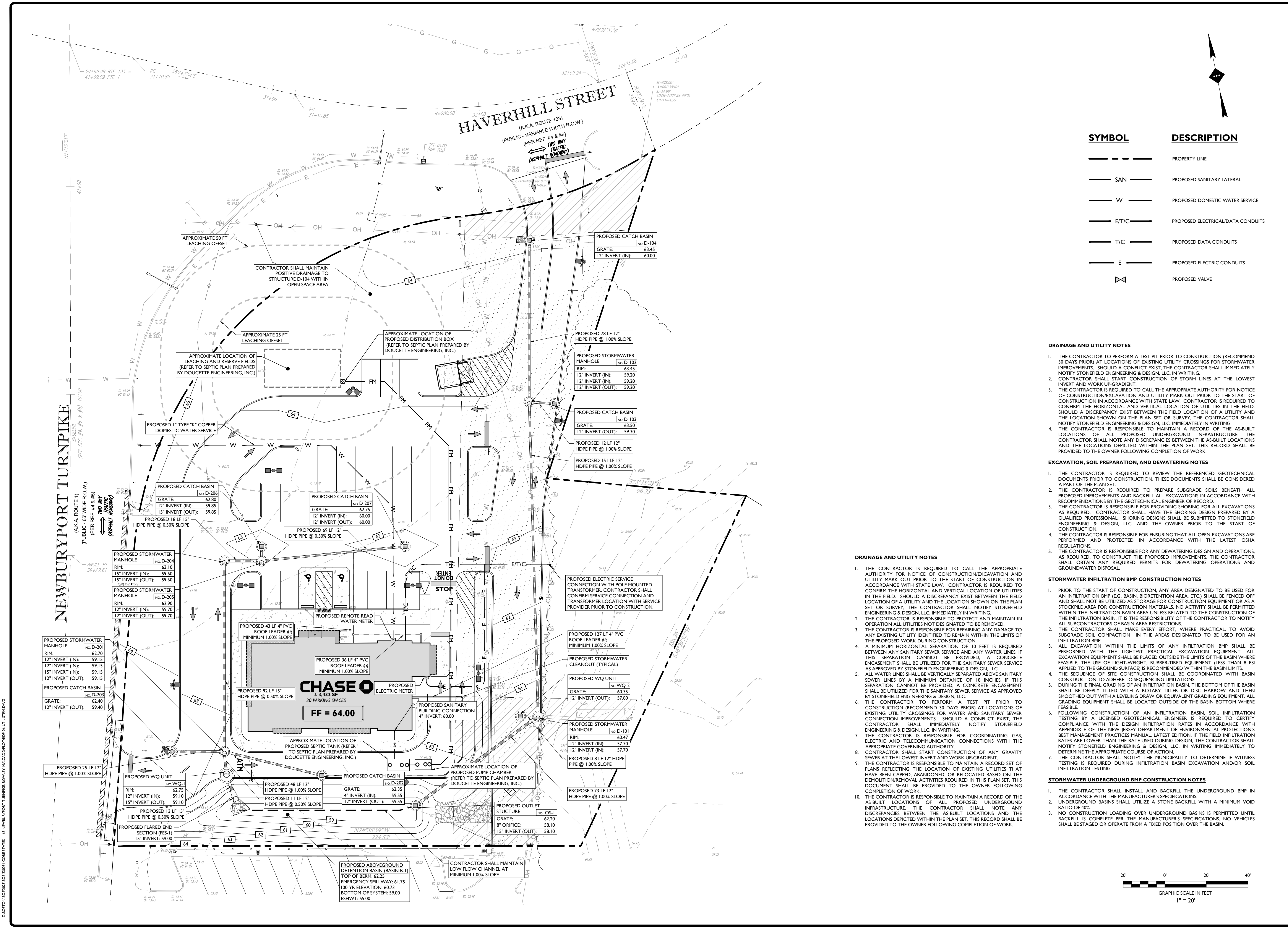
JOSHUA H. KLINE, P.E.
MASSACHUSETTS LICENSE NO. 53936
LICENSED PROFESSIONAL ENGINEER

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SCALE: 1" = 20' PROJECT ID: BOS-230034

TITLE:
**GRADING & DRAINAGE
PLAN**

DRAWING:
C-5



SYMBOL	DESCRIPTION
---	PROPERTY LINE
---	SAN
---	PROPOSED SANITARY LATERAL
---	W
---	PROPOSED DOMESTIC WATER SERVICE
---	ET/C
---	PROPOSED ELECTRICAL/DATA CONDUITS
---	T/C
---	PROPOSED DATA CONDUITS
---	E
---	PROPOSED ELECTRIC CONDUITS
∇	PROPOSED VALVE

- DRAINAGE AND UTILITY NOTES**
- THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR STORMWATER IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.
 - CONTRACTOR SHALL START CONSTRUCTION OF STORM LINES AT THE LOWEST INVERT AND WORK UP-GRADE.
 - THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

- EXCAVATION, SOIL PREPARATION, AND DEWATERING NOTES**
- THE CONTRACTOR IS REQUIRED TO REVIEW THE REFERENCED GEOTECHNICAL DOCUMENTS PRIOR TO CONSTRUCTION. THESE DOCUMENTS SHALL BE CONSIDERED A PART OF THE PLAN SET.
 - THE CONTRACTOR IS REQUIRED TO PREPARE SUBGRADE SOILS BENEATH ALL PROPOSED IMPROVEMENTS AND BACKFILL ALL EXCAVATIONS IN ACCORDANCE WITH RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER OF RECORD.
 - THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SHORING FOR ALL EXCAVATIONS AS REQUIRED. CONTRACTOR SHALL HAVE THE SHORING DESIGN PREPARED BY A QUALIFIED PROFESSIONAL. SHORING DESIGNS SHALL BE SUBMITTED TO STONEFIELD ENGINEERING & DESIGN, LLC AND THE OWNER PRIOR TO THE START OF CONSTRUCTION.
 - THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL OPEN EXCAVATIONS ARE PERFORMED AND PROTECTED IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS.
 - THE CONTRACTOR IS RESPONSIBLE FOR ANY DEWATERING DESIGN AND OPERATIONS, AS REQUIRED TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS FOR DEWATERING OPERATIONS AND GROUNDWATER DISPOSAL.

- STORMWATER INFILTRATION BMP CONSTRUCTION NOTES**
- PRIOR TO THE START OF CONSTRUCTION, ANY AREA DESIGNATED TO BE USED FOR AN INFILTRATION BMP (E.G. BASIN, BIOTENTION AREA, ETC) SHALL BE FENCED OFF AND SHALL NOT BE UTILIZED AS STORAGE FOR CONSTRUCTION EQUIPMENT OR AS A STOCKPILE AREA FOR CONSTRUCTION MATERIALS. NO ACTIVITY SHALL BE PERMITTED WITHIN THE INFILTRATION BASIN AREA UNLESS RELATED TO THE CONSTRUCTION OF THE INFILTRATION BASIN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL SUBCONTRACTORS OF BASIN AREA RESTRICTIONS.
 - THE CONTRACTOR SHALL MAKE EVERY EFFORT, WHERE PRACTICAL, TO AVOID SUBGRADE SOIL COMPACTION IN THE AREAS DESIGNATED TO BE USED FOR AN INFILTRATION BMP.
 - ALL EXCAVATION WITHIN THE LIMITS OF ANY INFILTRATION BMP SHALL BE PERFORMED WITH THE LIGHTEST PRACTICAL EXCAVATION EQUIPMENT. ALL EXCAVATION EQUIPMENT SHALL BE PLACED OUTSIDE THE LIMITS OF THE BASIN WHERE FEASIBLE. THE USE OF LIGHT-WEIGHT, RUBBER-TIRED EQUIPMENT LESS THAN 8 PSI APPLIED TO THE GROUND SURFACE IS RECOMMENDED WITHIN THE BASIN LIMITS.
 - THE SEQUENCE OF SITE CONSTRUCTION SHALL BE COORDINATED WITH BASIN CONSTRUCTION TO ADHERE TO SEQUENCING LIMITATIONS.
 - DURING THE FINAL GRADING OF AN INFILTRATION BASIN, THE BOTTOM OF THE BASIN SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND THEN SMOOTHED OUT WITH A LEVELING DRAW OR EQUIVALENT GRADING EQUIPMENT. ALL GRADING EQUIPMENT SHALL BE LOCATED OUTSIDE OF THE BASIN BOTTOM WHERE FEASIBLE.
 - FOLLOWING CONSTRUCTION OF AN INFILTRATION BASIN, SOIL INFILTRATION TESTING BY A LICENSED GEOTECHNICAL ENGINEER IS REQUIRED TO CERTIFY COMPLIANCE WITH THE DESIGN INFILTRATION RATES IN ACCORDANCE WITH APPENDIX E OF THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION'S BEST MANAGEMENT PRACTICES MANUAL, LATEST EDITION. IF THE FIELD INFILTRATION RATES ARE LOWER THAN THE RATE USED DURING DESIGN, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING IMMEDIATELY TO DETERMINE THE APPROPRIATE COURSE OF ACTION.
 - THE CONTRACTOR SHALL NOTIFY THE MUNICIPALITY TO DETERMINE IF WINNESS TESTING IS REQUIRED DURING INFILTRATION BASIN EXCAVATION AND/OR SOIL INFILTRATION TESTING.

- STORMWATER UNDERGROUND BMP CONSTRUCTION NOTES**
- THE CONTRACTOR SHALL INSTALL AND BACKFILL THE UNDERGROUND BMP IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
 - UNDERGROUND BASINS SHALL UTILIZE A STONE BACKFILL WITH A MINIMUM VOID RATIO OF 40%.
 - NO CONSTRUCTION LOADING OVER UNDERGROUND BASINS IS PERMITTED UNTIL BACKFILL IS COMPLETE PER THE MANUFACTURER'S SPECIFICATIONS. NO VEHICLES SHALL BE STAGED OR OPERATE FROM A FIXED POSITION OVER THE BASIN.

- DRAINAGE AND UTILITY NOTES**
- THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN IN OPERATION ALL UTILITIES NOT DESIGNATED TO BE REMOVED.
 - THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO ANY EXISTING UTILITY IDENTIFIED TO REMAIN WITHIN THE LIMITS OF THE PROPOSED WORK DURING CONSTRUCTION.
 - A MINIMUM HORIZONTAL SEPARATION OF 10 FEET IS REQUIRED BETWEEN ANY SANITARY SEWER SERVICE AND ANY WATER LINES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASUREMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - ALL WATER LINES SHALL BE VERTICALLY SEPARATED ABOVE SANITARY SEWER LINES BY A MINIMUM DISTANCE OF 18 INCHES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASUREMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR WATER AND SANITARY SEWER CONNECTION IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRIC AND TELECOMMUNICATION CONNECTIONS WITH THE APPROPRIATE GOVERNING AUTHORITY.
 - CONTRACTOR SHALL START CONSTRUCTION OF ANY GRAVITY SEWER AT THE LOWEST INVERT AND WORK UP-GRADE.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD SET OF PLANS REFLECTING THE LOCATION OF EXISTING UTILITIES THAT HAVE BEEN CAPPED, ABANDONED, OR RELOCATED BASED ON THE DEMOLITION/REMOVAL ACTIVITIES REQUIRED IN THIS PLAN SET. THIS DOCUMENT SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

NO.	DATE	ISSUE	BY	DESCRIPTION
02	03/29/2024	01	JV	MUNICIPAL RESUBMISSION - SIGNAGE
	03/29/2024	01	JV	MUNICIPAL RESUBMISSION - SITE PLAN REVIEW

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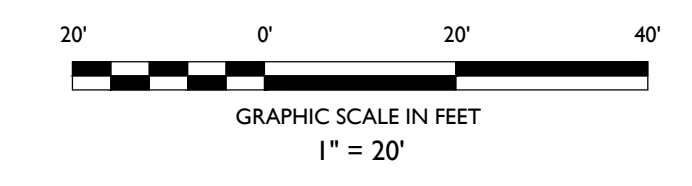
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SCALE: 1" = 20' PROJECT ID: BOS-230034

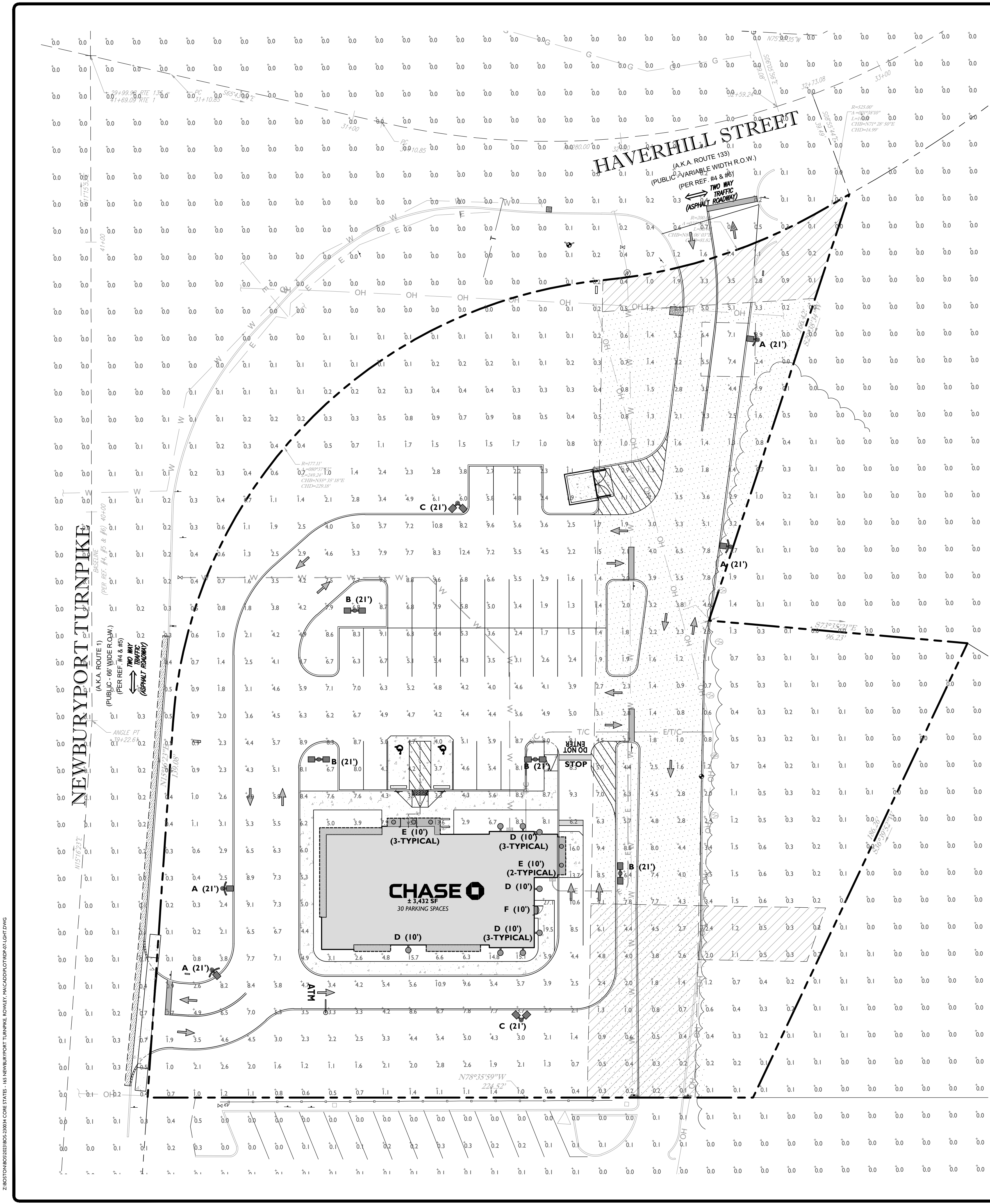
TITLE:
DRAINAGE AND UTILITY PLAN

DRAWING:

C-6



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LIGHTING REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 8.6.4.3	POLE LIGHT REQUIREMENTS: MAXIMUM MOUNTING HEIGHT: 30 FT	21 FT
§ 8.6.4.5	AVERAGE ILLUMINATION REQUIREMENTS: THE AVERAGE ILLUMINATION LEVEL SHALL NOT EXCEED THE ILLUMINATION LEVEL PUBLISHED FOR SUCH ACTIVITY BY THE IESNA HANDBOOK.	COMPLIES

PROPOSED LUMINAIRE SCHEDULE							
SYMBOL	LABEL	QUANTITY	LUMINAIRE	DISTRIBUTION	LLF	MANUFACTURER	IES FILE
	A	4	EVOLVE COMPACT (EACL) AREA LIGHT WITH SHIELD 122 WATTS, 4K	TYPE III	0.90	GE CURRENT	EACL01_F3AW740_ABL-BLCK.IES
	B	4	EVOLVE COMPACT (EACL) AREA LIGHT 122 WATTS, 4K	TYPE IV	0.90	GE CURRENT	EACL01_F4AF740_IES
	C	2	EVOLVE COMPACT (EACL) AREA LIGHT 122 WATTS, 4K	TYPE IV	0.90	GE CURRENT	EACL01_F4AF740_IES
	D	8	LANTERNA 9004 LED, WALL MOUNTED CYLINDER	DOWNLIGHT	0.90	COOPER LIGHTING	9004-W (RW, R)LED4080-WWT-LI-UNV (1).IES
	E	5	BULLET OUTDOOR RECESSED FIXED DOWNLIGHT IP66	CANOPY	0.90	ILLUMINATION	5811-ISA20L8040W.IES
	F	1	LUMARK CROSS TOUR MAXX LED WALL PACK	FORWARD	0.90	EATON	XTOR48-W.IES

SYMBOL	DESCRIPTION
---	PROPOSED CALCULATION AREA
---	PROPOSED ISOMETRIC LINE
A (XX')	PROPOSED LIGHTING FIXTURE (MOUNTING HEIGHT)
+xx	PROPOSED LIGHTING INTENSITY (FOOT CANDLES)
	PROPOSED AREA LIGHT
	PROPOSED BUILDING MOUNTED LIGHT



AREA LIGHT FIXTURE 'A' - 'C'



AREA LIGHT FIXTURE 'D'



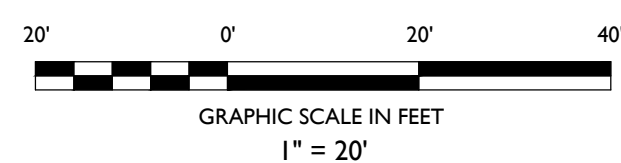
AREA LIGHT FIXTURE 'E'



AREA LIGHT FIXTURE 'F'

- GENERAL LIGHTING NOTES**
- THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER. ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURE MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH AS WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS.
 - WHERE APPLICABLE, THE EXISTING LIGHT LEVELS DEPICTED WITHIN THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR LIGHTING FIXTURE MODEL.
 - UNLESS NOTED ELSEWHERE WITHIN THIS PLAN SET, THE LIGHT LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS:
 - LIGHT EMITTING DIODES (LED): 0.90
 - HIGH PRESSURE SODIUM: 0.72
 - METAL HALIDE: 0.72
 - THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING/ PROPOSED DRAINAGE UTILITY, OR OTHER IMPROVEMENTS.
 - THE CONTRACTOR IS RESPONSIBLE TO PREPARE A WIRING PLAN AND PROVIDE ELECTRIC SERVICE TO ALL PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC.

- ATM LIGHTING NOTES:**
- THE CONTRACTOR SHALL REPLACE LAMP COVERS, RE-LAMP AND RE-BALLAST EXISTING LIGHT FIXTURES AS INDICATED WITHIN THE PLAN SET. THE EXISTING FIXTURE HEIGHT SHALL BE MAINTAINED UNLESS INDICATED OTHERWISE.
 - PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, IN WRITING IF THE EXISTING LIGHT FIXTURES ARE NOT THE MINIMUM WATTAGE SPECIFIED WITHIN THE PLAN SET.
 - THE CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT ANY EXISTING LIGHT POLES IDENTIFIED FOR REUSE WITH A PROPOSED LIGHT FIXTURE(S) SHALL BE IN ACCEPTABLE WORKING CONDITION AND HAVE THE CAPACITY TO SUPPORT THE PROPOSED LIGHT FIXTURE(S). ANY MOUNTING EQUIPMENT REQUIRED TO ATTACH THE PROPOSED LIGHTING FIXTURE TO THE EXISTING LIGHT POLES SHALL BE PROVIDED BY THE CONTRACTOR.
 - THE CONTRACTOR SHALL CONFIRM THAT THE LOCATION OF ANY PROPOSED BUILDING MOUNTED LIGHTING FIXTURE WILL NOT CONFLICT WITH ANY EXISTING OR PROPOSED STRUCTURAL ELEMENT (E.G. CANOPY SUPPORT BEAMS). THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, IN WRITING OF ANY FIXTURE CONFLICT PRIOR TO THE START OF CONSTRUCTION.
 - ALL EXISTING TREE LIMBS WITHIN THE 60 FOOT ATM RADIUS SHOWN IN THE PLAN SET SHALL BE TRIMMED TO A MINIMUM OF 6 FEET ABOVE GRADE. ALL SHRUBS WITHIN THE 60 FOOT ATM RADIUS SHALL BE TRIMMED TO A MINIMUM OF 36 INCHES ABOVE GRADE. ALL BRUSH SHALL BE REMOVED. THE CONTRACTOR SHALL CONSIDER ALL FUTURE GROWTH AND FULL BLOOM WHEN TRIMMING LANDSCAPING. EXISTING TREE LIMBS ADJACENT TO LIGHTING FIXTURES SHALL BE TRIMMED AS REQUIRED TO PREVENT LIGHT INTERFERENCE.
 - PRIOR TO BID, CONTRACTOR SHALL VERIFY EXISTING EXTERIOR LIGHTING CONDITIONS AFTER DUSK AND NOTIFY THE DEVELOPER/OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC, OF DAMAGED OR INOPERABLE LIGHTS. THE CONTRACTOR SHALL REPAIR ALL INOPERABLE LIGHTS UNLESS OTHERWISE NOTED WITHIN THIS PLAN SET.
 - THE ILLUMINATION LEVELS DEPICTED WITHIN THE PLAN SET ARE BASED ON REGULATORY STATE STANDARDS FOR SAFETY LIGHTING AND ON CLIENT STANDARDS.
 - ALL LIGHTING FIXTURES, UNLESS OTHERWISE NOTED WITHIN THIS PLAN SET, HAVE THE PHOTOCELL OPTION ENABLED.
 - EXISTING LIGHTING FIXTURES CONTROLLED BY OUTSIDE ENTITIES (E.G. LANDLORD) HAVE BEEN EXCLUDED FROM THE LIGHTING ANALYSIS REFLECTED WITHIN THE PLAN SET. THE PROPOSED LIGHT LEVELS HAVE BEEN DESIGNED TO COMPLY WITH ALL APPLICABLE ATM AND SAFETY LIGHTING REQUIREMENTS INDEPENDENT OF ANY UNCONTROLLED LIGHT FIXTURES.



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02	03/29/2024	01	JV	MUNICIPAL RESUBMISSION - SIGNAGE
			JV	MUNICIPAL SUBMISSION - SITE PLAN REVIEW

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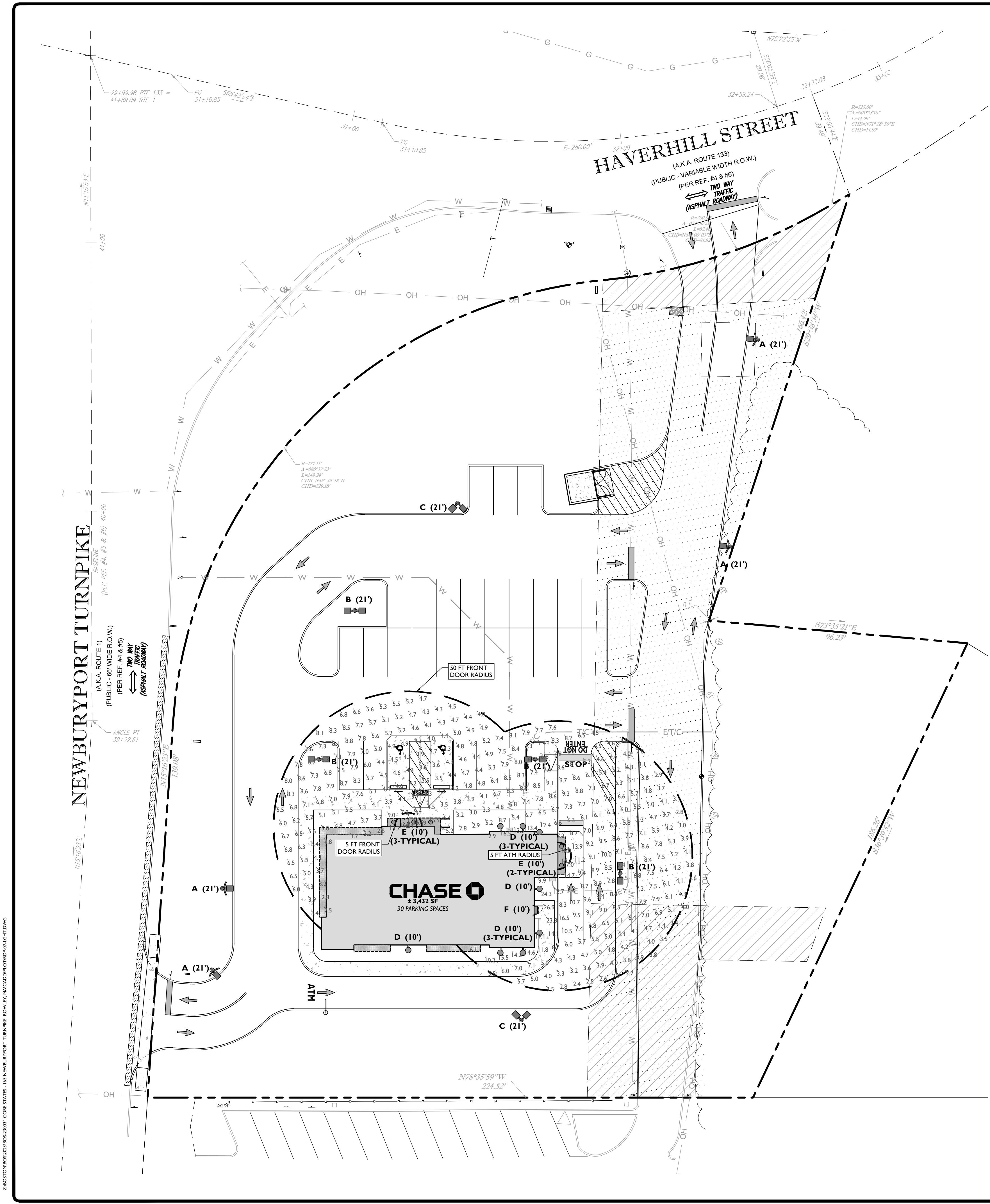
JOSHUA H. KLINE, P.E.
MASSACHUSETTS LICENSE NO. 53936
LICENSED PROFESSIONAL ENGINEER

STONEFIELD
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SCALE: 1" = 20' PROJECT ID: BOS-230034

TITLE: LIGHTING PLAN

DRAWING: C-7



LIGHTING REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 8.6.4.3	POLE LIGHT REQUIREMENTS: MAXIMUM MOUNTING HEIGHT: 30 FT	21 FT
§ 8.6.4.5	AVERAGE ILLUMINATION REQUIREMENTS: THE AVERAGE ILLUMINATION LEVEL SHALL NOT EXCEED THE ILLUMINATION LEVEL PUBLISHED FOR SUCH ACTIVITY BY THE IESNA HANDBOOK.	COMPLIES

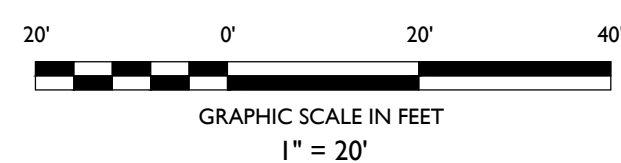
PROPOSED LUMINAIRE SCHEDULE							
SYMBOL	LABEL	QUANTITY	LUMINAIRE	DISTRIBUTION	LLF	MANUFACTURER	IES FILE
	A	4	EVOLVE COMPACT (EACL) AREA LIGHT WITH SHIELD 122 WATTS, 4K	TYPE III	0.90	GE CURRENT	EACL01_F3AW740_ABL-BLCK.IES
	B	4	EVOLVE COMPACT (EACL) AREA LIGHT 122 WATTS, 4K	TYPE IV	0.90	GE CURRENT	EACL01_F4AF740_IES
	C	2	EVOLVE COMPACT (EACL) AREA LIGHT 122 WATTS, 4K	TYPE IV	0.90	GE CURRENT	EACL01_F4AF740_IES
	D	8	LAN TERRA 9004 LED, WALL MOUNTED CYLINDER	DOWNLIGHT	0.90	COOPER LIGHTING	9004-W (RW, R) LED4080-WWT-L1-UNV (1).IES
	E	5	BULLET OUTDOOR RECESSED FIXED DOWNLIGHT IP66	CANOPY	0.90	ILLUMINATION	5811-ISA20L8040W.IES
	F	1	LUMARK CROSSTOUR MAXX LED WALL PACK	FORWARD	0.90	EATON	XTOR48-W.IES

STANDARD CHASE BANK ATM / AHD REQUIREMENTS	
REQUIRED	PROPOSED
MINIMUM 10 FOOTCANDLES AT FACE OF ATM EXTENDING 5 FEET OUTWARD IN ALL DIRECTIONS MEASURED 36" ABOVE GRADE	17.0 FC
MINIMUM 10 FOOTCANDLES AT FACE OF DOOR EXTENDING 5 FEET OUTWARD IN ALL DIRECTIONS MEASURED 36" ABOVE GRADE	16.0 FC
MINIMUM 2 FOOTCANDLES AT FACE OF ATM EXTENDING 50 FEET OUTWARD IN ALL DIRECTIONS MEASURED 36" ABOVE GRADE	2.4 FC

SYMBOL	DESCRIPTION
---	PROPOSED CALCULATION AREA
---	PROPOSED ISOMETRIC LINE
A (XX')	PROPOSED LIGHTING FIXTURE (MOUNTING HEIGHT)
+XX	PROPOSED LIGHTING INTENSITY (FOOTCANDLES)
	PROPOSED AREA LIGHT
	PROPOSED BUILDING MOUNTED LIGHT

- GENERAL LIGHTING NOTES**
- THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER. ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURE MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH AS WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS.
 - WHERE APPLICABLE, THE EXISTING LIGHT LEVELS DEPICTED WITHIN THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR LIGHTING FIXTURE MODEL.
 - UNLESS NOTED ELSEWHERE WITHIN THIS PLAN SET, THE LIGHT LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS:
 - LIGHT EMITTING DIODES (LED): 0.90
 - HIGH PRESSURE SODIUM: 0.72
 - METAL HALIDE: 0.72
 - THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING/ PROPOSED DRAINAGE UTILITY, OR OTHER IMPROVEMENTS.
 - THE CONTRACTOR IS RESPONSIBLE TO PREPARE A WIRING PLAN AND PROVIDE ELECTRIC SERVICE TO ALL PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC.

- ATM LIGHTING NOTES:**
- THE CONTRACTOR SHALL REPLACE LAMP COVERS, RE-LAMP AND RE-BALLAST EXISTING LIGHT FIXTURES AS INDICATED WITHIN THE PLAN SET. THE EXISTING FIXTURE HEIGHT SHALL BE MAINTAINED UNLESS INDICATED OTHERWISE.
 - PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, IN WRITING IF THE EXISTING LIGHT FIXTURES ARE NOT THE MINIMUM WATTAGE SPECIFIED WITHIN THE PLAN SET.
 - THE CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT ANY EXISTING LIGHT POLES IDENTIFIED FOR REUSE WITH A PROPOSED LIGHT FIXTURE(S) SHALL BE IN ACCEPTABLE WORKING CONDITION AND HAVE THE CAPACITY TO SUPPORT THE PROPOSED LIGHT FIXTURE(S). ANY MOUNTING EQUIPMENT REQUIRED TO ATTACH THE PROPOSED LIGHTING FIXTURE TO THE EXISTING LIGHT POLE SHALL BE PROVIDED BY THE CONTRACTOR.
 - THE CONTRACTOR SHALL CONFIRM THAT THE LOCATION OF ANY PROPOSED BUILDING MOUNTED LIGHTING FIXTURE WILL NOT CONFLICT WITH ANY EXISTING OR PROPOSED STRUCTURAL ELEMENT (E.G. CANOPY SUPPORT BEAMS). THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, IN WRITING OF ANY FIXTURE CONFLICT PRIOR TO THE START OF CONSTRUCTION.
 - ALL EXISTING TREE LIMBS WITHIN THE 60 FOOT ATM RADIUS SHOWN IN THE PLAN SET SHALL BE TRIMMED TO A MINIMUM OF 6 FEET ABOVE GRADE. ALL SHRUBS WITHIN THE 60 FOOT ATM RADIUS SHALL BE TRIMMED TO A MINIMUM OF 36 INCHES ABOVE GRADE. ALL BRUSH SHALL BE REMOVED. THE CONTRACTOR SHALL CONSIDER ALL FUTURE GROWTH AND FULL BLOOM WHEN TRIMMING LANDSCAPING. EXISTING TREE LIMBS ADJACENT TO LIGHTING FIXTURES SHALL BE TRIMMED AS REQUIRED TO PREVENT LIGHT INTERFERENCE.
 - PRIOR TO BID, CONTRACTOR SHALL VERIFY EXISTING EXTERIOR LIGHTING CONDITIONS AFTER DUSK AND NOTIFY THE DEVELOPER/OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC, OF DAMAGED OR INOPERABLE LIGHTS. THE CONTRACTOR SHALL REPAIR ALL INOPERABLE LIGHTS UNLESS OTHERWISE NOTED WITHIN THIS PLAN SET.
 - THE ILLUMINATION LEVELS DEPICTED WITHIN THE PLAN SET ARE BASED ON REGULATORY STATE STANDARDS FOR SAFETY LIGHTING AND ON CLIENT STANDARDS.
 - ALL LIGHTING FIXTURES, UNLESS OTHERWISE NOTED WITHIN THIS PLAN SET, HAVE THE PHOTOCELL OPTION ENABLED.
 - EXISTING LIGHTING FIXTURES CONTROLLED BY OUTSIDE ENTITIES (E.G. LANDLORD) HAVE BEEN EXCLUDED FROM THE LIGHTING ANALYSIS REFLECTED WITHIN THE PLAN SET. THE PROPOSED LIGHT LEVELS HAVE BEEN DESIGNED TO COMPLY WITH ALL APPLICABLE ATM AND SAFETY LIGHTING REQUIREMENTS INDEPENDENT OF ANY UNCONTROLLED LIGHT FIXTURES.



NO.	DATE	ISSUE	BY	DESCRIPTION
02	03/29/2024		JV	MUNICIPAL RESUBMISSION - SIGNAGE
01	03/08/2024		JV	MUNICIPAL SUBMISSION - SITE PLAN REVIEW

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CHASE
PROPOSED BANK WITH
DRIVE-THRU ATM

MAP: 14 LOT: 13
165 NEWBURYPORT TURNPIKE (US ROUTE 1)
TOWN OF ROWLEY
ESSEX COUNTY, MASSACHUSETTS

JOSHUA H. KLINE, P.E.
MASSACHUSETTS LICENSE NO. 53936
LICENSED PROFESSIONAL ENGINEER

STONEFIELD
engineering & design

SCALE: 1" = 20' PROJECT ID: BOS-230034

TITLE:
SECURITY LIGHTING PLAN

DRAWING:

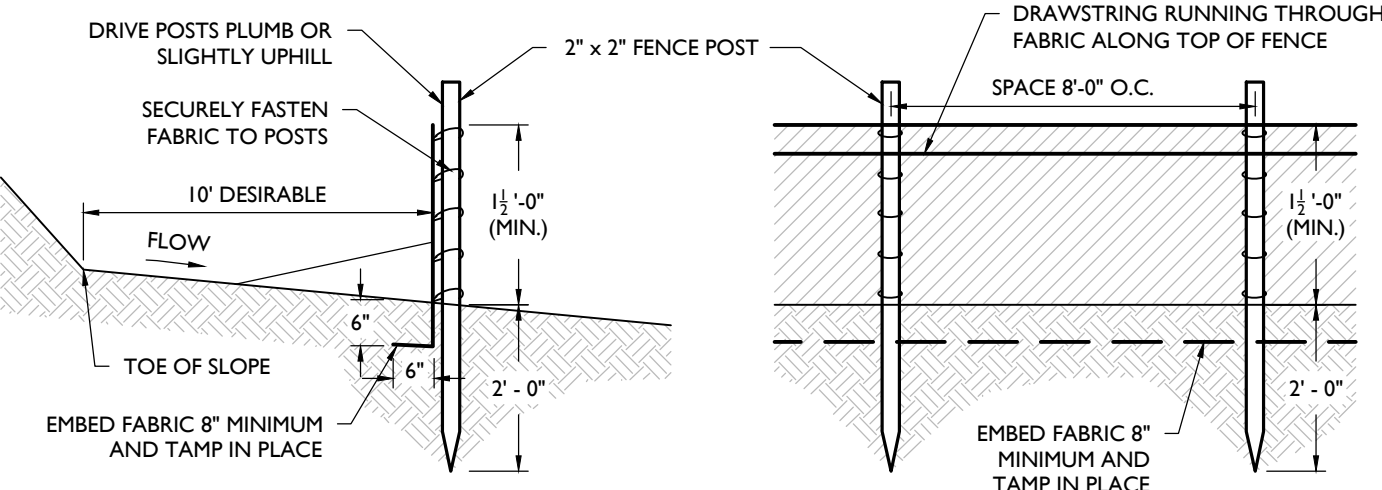
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Z:\PROJECTS\2023\BOS230034\CONSTR\165 NEWBURYPORT TURNPIKE ROWLEY MA\CAD\DWG\230034_SGL.DWG

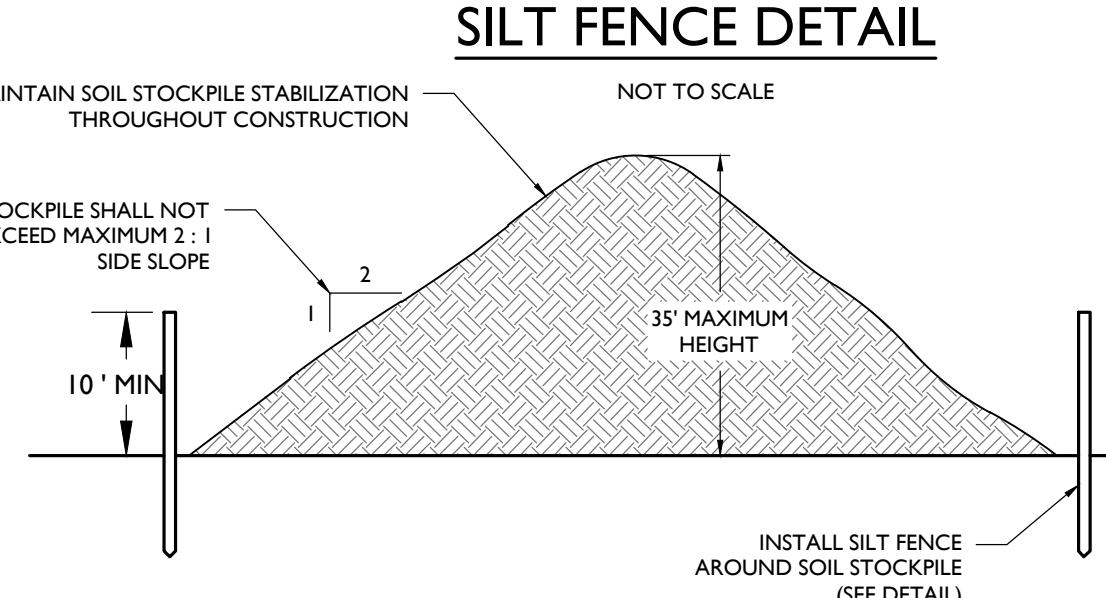
NEWBURYPORT TURNPIKE
(A.K.A. ROUTE 1)
(PUBLIC - 66' WIDE R.O.W.)
(PER REF. #4 & #6)
TWO WAY TRAFFIC (ASPHALT ROADWAY)

HAVERHILL STREET
(A.K.A. ROUTE 133)
(PUBLIC - VARIABLE WIDTH R.O.W.)
(PER REF. #4 & #6)
TWO WAY TRAFFIC (ASPHALT ROADWAY)

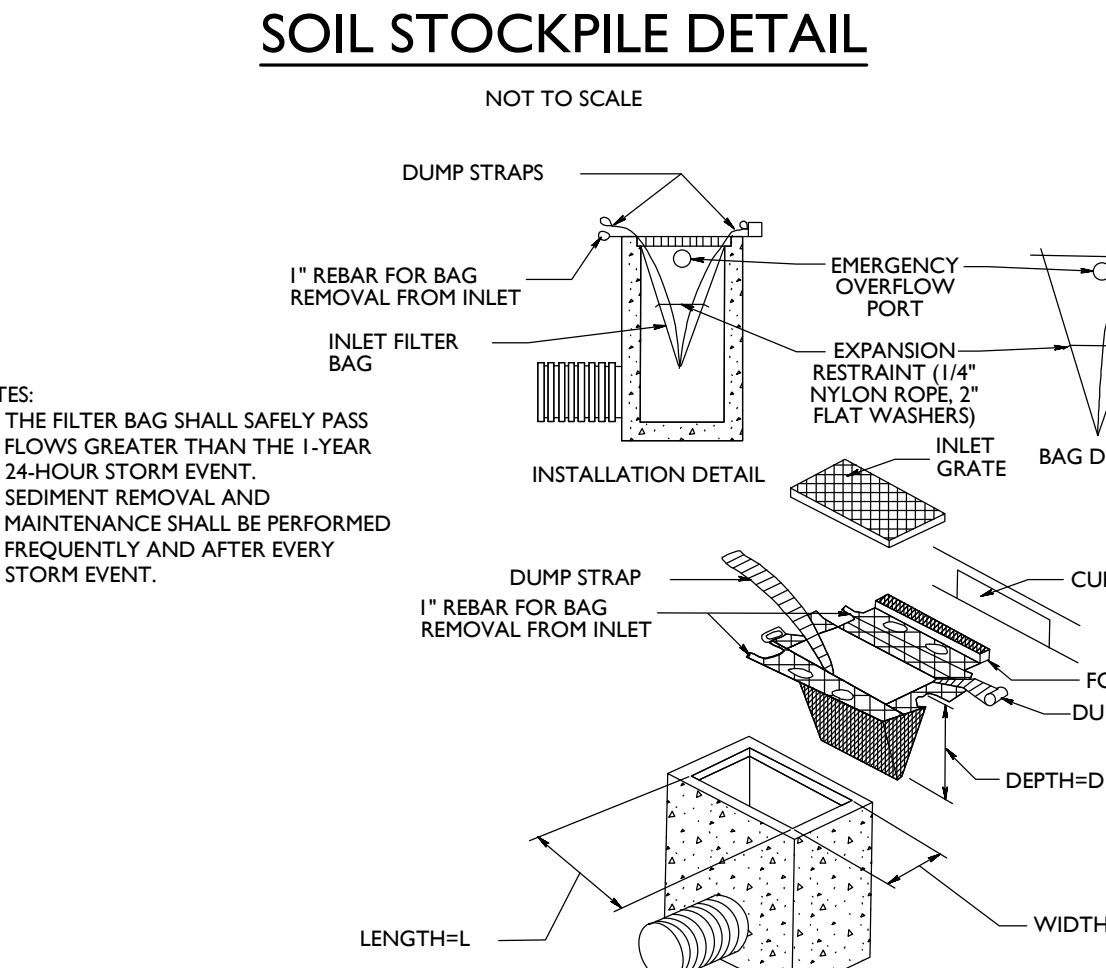
CHASE
± 3,432 SF
30 PARKING SPACES



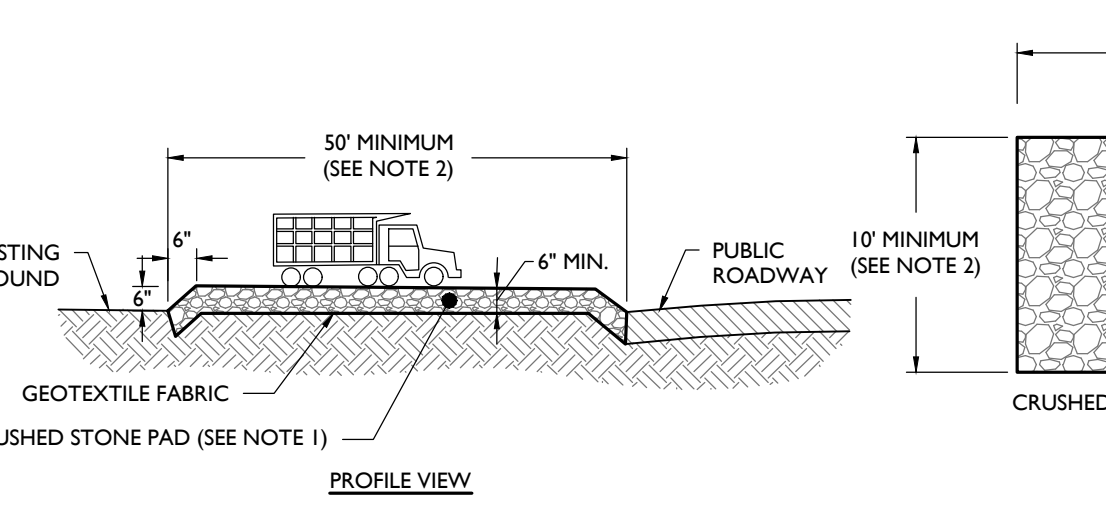
- NOTES:**
1. SECURELY FASTEN GEOTEXTILE TO FENCE POST BY USE OF WIRE TIES, HOG RINGS, STAPLES OR POCKETS. FOUR TO SIX FASTENERS PER POST.
 2. GEOTEXTILE FABRIC TO BE EMBEDDED 8" (MIN) AND TAMP IN PLACE.
 3. SECURELY FASTEN ENDS OF INDIVIDUAL ROLLS OF GEOTEXTILE TO A POST BY WRAPPING EACH END OF THE GEOTEXTILE AROUND THE POST TWICE AND ATTACHING AS SPECIFIED IN NOTE 1 ABOVE. SPLICING OF INDIVIDUAL ROLLS SHALL NOT OCCUR AT LOW POINTS.
 4. SET SILT FENCE WITHIN PROJECT LIMITS. 10'-0" IS DESIRABLE.



- NOTES:**
1. LOCATE THE TOPSOIL STOCKPILE SO THAT IT DOES NOT INTERFERE WITH WORK ON THE SITE.
 2. SURROUND ALL TOPSOIL STOCKPILES WITH AN INTERCEPTOR DIKE WITH GRAVEL OUTLET AND SILT FENCE.
 3. EITHER SEED OR COVER STOCKPILES WITH CLEAR PLASTIC OR OTHER MULCHING MATERIALS WITHIN 7 DAYS OF THE FORMATION OF THE STOCKPILE.



INLET FILTER BAG DETAIL
NOT TO SCALE



- NOTES:**
1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 3-INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT PLACED ON A STABLE FOUNDATION AS SPECIFIED IN THE PLAN.
 2. THE MINIMUM LENGTH OF THE GRAVEL PAD SHALL BE 50 FEET. EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH MAY BE USED, THE WIDTH SHALL BE 10' MINIMUM OR THE FULL WIDTH OF THE ACCESS POINT, WHICHEVER IS GREATER.
 3. GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE STONE FILL AND THE EARTH SURFACE BELOW THE PAD TO REDUCE THE MIGRATION OF SOIL PARTICLES FROM THE UNDERLYING SOIL INTO THE STONE AND VICE VERSA. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
 4. IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE, 6 TO 8 INCHES HIGH WITH 3:1 SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
 5. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHOULD BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
 6. WASHING: IF THE SITE CONDITIONS ARE SUCH THAT THE MAJORITY OF MUD IS NOT REMOVED FROM THE VEHICLE TIRES BY THE GRAVEL PAD, THEN THE TIRES SHOULD BE WASHED BEFORE THE VEHICLE ENTERS THE ROAD OR STREET. THE WASH AREA SHOULD BE A LEVEL AREA WITH 3-INCH WASHED STONE MINIMUM, OR A COMMERCIAL RACK. WASH WATER SHOULD BE DIRECTED INTO A SEDIMENT TRAP, A VEGETATED FILTER STRIP, OR OTHER APPROVED SEDIMENT TRAPPING DEVICE. SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY WATERCOURSES.
 7. A FILTER FABRIC FENCE SHOULD BE INSTALLED DOWN-GRADIENT FROM THE CONSTRUCTION ENTRANCE IN ORDER TO CONTAIN ANY SEDIMENT-LADEN RUNOFF FROM THE ENTRANCE.

STABILIZED CONSTRUCTION ACCESS DETAIL
NOT TO SCALE



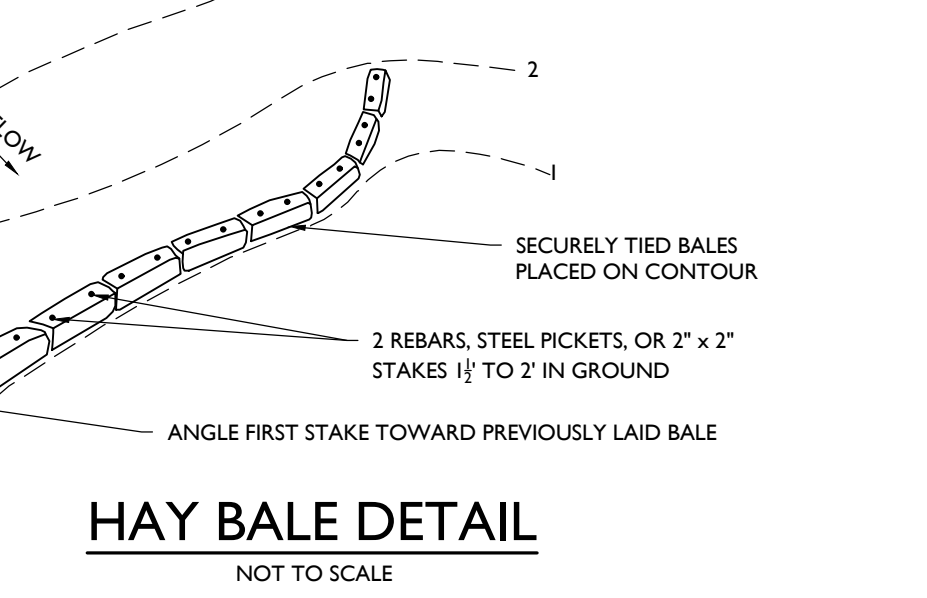
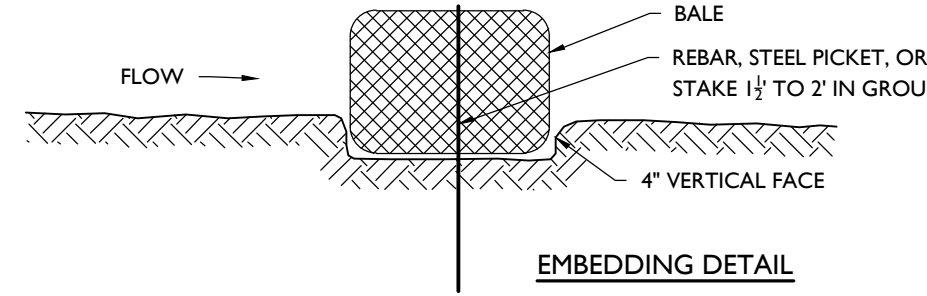
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SYMBOL	DESCRIPTION
---	PROPERTY BOUNDARY
- - - -	ADJACENT PROPERTY BOUNDARY
---	PROPOSED LIMIT OF DISTURBANCE
- SF -	PROPOSED SILT FENCE
[Symbol]	PROPOSED STOCKPILE & EQUIPMENT STORAGE
[Symbol]	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
[Symbol]	PROPOSED INLET PROTECTION FILTER

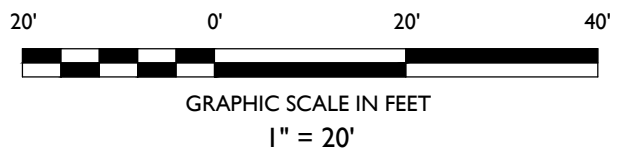
- SOIL EROSION AND SEDIMENT CONTROL NOTES**
1. THE CONTRACTOR IS RESPONSIBLE FOR SOIL EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
 2. THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL IN COMPLIANCE WITH LOCAL, STATE AND FEDERAL AIR QUALITY STANDARDS.
 3. THE CONTRACTOR IS RESPONSIBLE TO INSPECT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES WEEKLY AND AFTER A PRECIPITATION EVENT GREATER THAN 1 INCH. THE CONTRACTOR SHALL MAINTAIN AN INSPECTION LOG ON SITE AND DOCUMENT CORRECTIVE ACTION TAKEN THROUGHOUT THE COURSE OF CONSTRUCTION AS REQUIRED.

SOIL CHARACTERISTICS CHART	
TYPE OF SOIL	WINDSOR LOAMY SAND, 3 TO 8% SLOPES
PERCENT OF SITE COVERAGE	100.0%
HYDROLOGIC SOIL GROUP	A
DEPTH TO RESTRICTIVE LAYER	> 80 INCHES
SOIL PERMEABILITY	1.42 TO 99.90 IN/HR
DEPTH TO WATER TABLE	> 80 INCHES

- SEQUENCE OF CONSTRUCTION**
1. INSTALL CONSTRUCTION ENTRANCE AND SILT FENCE (2 DAYS).
 2. DEMOLISH EXISTING PAVEMENT WHERE APPLICABLE (7 DAYS).
 3. ROUGH GRADING AND TEMPORARY SEEDING (21 DAYS).
 4. BASIN CONSTRUCTION INCLUDING STABILIZATION (14 DAYS).
 5. BUILDING CONSTRUCTION AND SITE IMPROVEMENTS (100 DAYS).
 6. INSTALL CURBSIDE SEDIMENT BARRIERS (1 DAY).
 7. SOIL RESTORATION MEASURES (3 DAYS).
 8. LANDSCAPING IMPROVEMENTS AND FINAL SEEDING & TOP SOILING (7 DAYS).
 9. REMOVE SOIL EROSION MEASURES (1 DAY).
- NOTE: TIME DURATIONS ARE APPROXIMATE AND ARE INTENDED TO ACT AS A GENERAL GUIDE TO THE CONSTRUCTION TIMELINE. ALL DURATIONS ARE SUBJECT TO CHANGE BY CONTRACTOR. CONTRACTOR SHALL SUBMIT CONSTRUCTION SCHEDULE TO THE TOWN AND ENGINEER. CONTRACTOR SHALL PHASE CONSTRUCTION ACCORDINGLY.



HAY BALE DETAIL
NOT TO SCALE



NO.	DATE	ISSUE	BY	DESCRIPTION
02	03/29/2024	01	JV	MUNICIPAL RESUBMISSION - SIGNAGE
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CHASE
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MAP: 14 LOT: 13
165 NEWBURYPORT TURNPIKE (US ROUTE 1)
TOWN OF ROWLEY
ESSEX COUNTY, MASSACHUSETTS

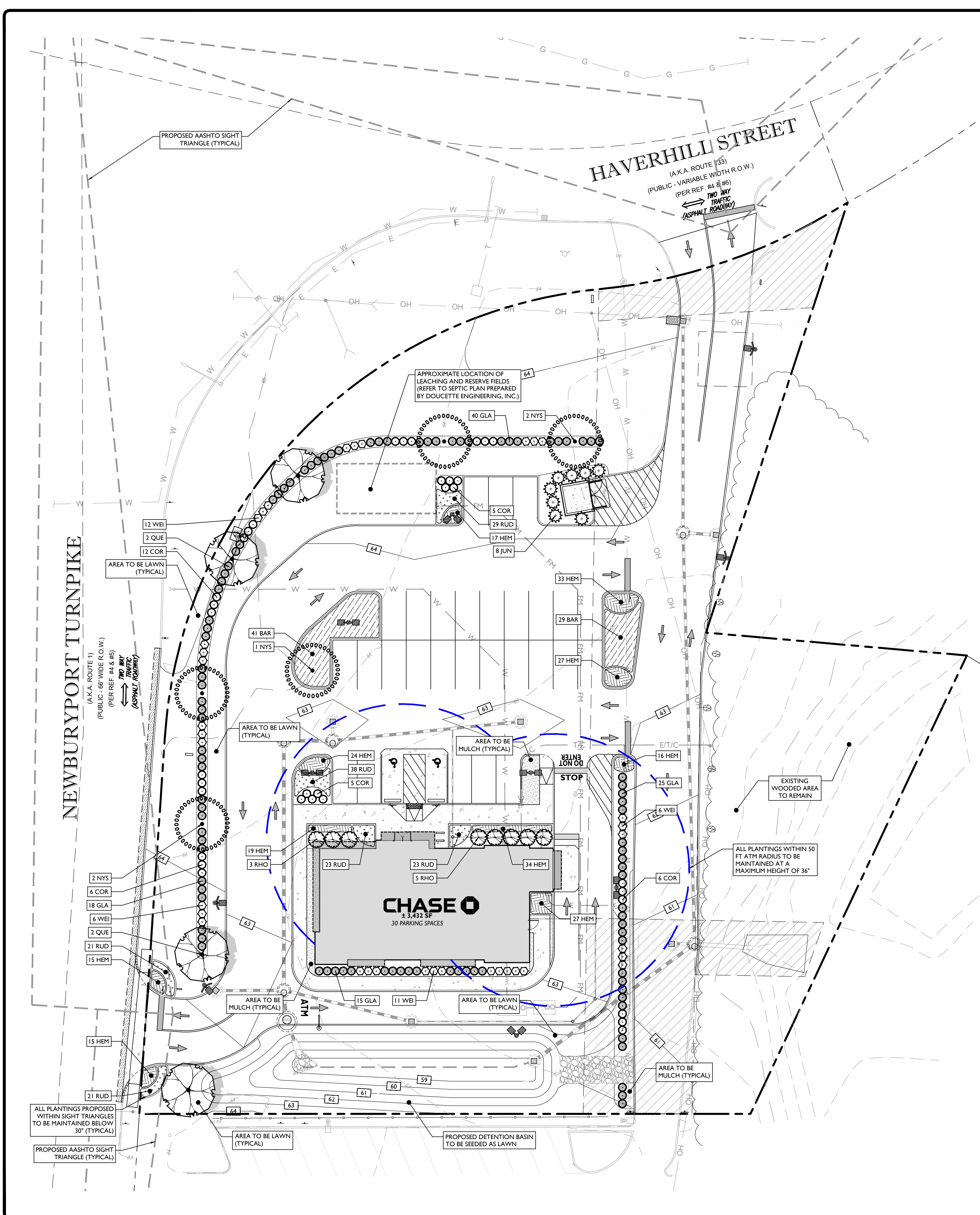
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JOSHUA H. KLINE, P.E.
MASSACHUSETTS LICENSE No. 53936
LICENSED PROFESSIONAL ENGINEER

SCALE: 1" = 20' PROJECT ID: BOS-230034

TITLE:
SOIL EROSION & SEDIMENT CONTROL PLAN

DRAWING:
C-8



PLANT SCHEDULE							
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
DECIDUOUS TREES							
	NYS	5	NYSSA SYLVATICA	TUPELO	2.5' - 3' CAL	B&B	NATIVE, SALT TOLERANT
	QUE	4	QUERCUS RUBRA	NORTHERN RED OAK	2.5' - 3' CAL	B&B	NATIVE, SALT TOLERANT
EVERGREEN TREES							
	JUN	9	JUNIPERUS VIRGINIANA 'N. SELECT GREEN'	EMERALD FEATHER EASTERN RED CEDAR	6' - 7' HT	B&B	NATIVE, SALT TOLERANT
SHRUBS							
	COR	34	CORNUS STOLONIFERA 'FARROW'	ARCTIC FIRE RED TWIG DOGWOOD	18" - 24"	POT	NATIVE
	WEI	45	WEIGELA FLORIDA 'BRAMWELL'	FINE WINE WEIGELA	18" - 24"	POT	HARDY, TOLERANT OF CLIMATIC CONDITIONS, ATTRACTS WILDLIFE
EVERGREEN SHRUBS							
	GLA	97	ILEX GLABRA 'COMPACTA'	COMPACT INKBERRY	18" - 24"	POT	NATIVE, DROUGHT TOLERANT, SALT TOLERANT
	RHO	8	RHODODENDRON X 'P.J.M. ELITE'	P.J.M. ELITE RHODODENDRON	18" - 24"	POT	HARDY, TOLERANT OF CLIMATIC CONDITIONS, ATTRACTS WILDLIFE
GROUND COVERS							
	BAR	70	JUNIPERUS HORIZONTALIS 'BAR HARBOR'	BAR HARBOR CREEPING JUNIPER	1 GAL.	POT (36" O.C.)	NATIVE, DROUGHT TOLERANT
PERENNIALS AND GRASSES							
	HEM	242	HEMEROCALLIS X 'STELLA DE ORO'	STELLA DE ORO DAYLILY	1 GAL.	POT (18" O.C.)	HARDY, TOLERANT OF CLIMATIC CONDITIONS, ATTRACTS WILDLIFE
	RUD	113	RUDBECKIA HIRTA	BLACK-EYED SUSAN	1 GAL.	POT (18" O.C.)	NATIVE, ATTRACTS INSECTS & POLLINATORS

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN ON THE LANDSCAPE PLAN AND WITHIN THE PLANT LIST, THE PLAN SHALL DICTATE.

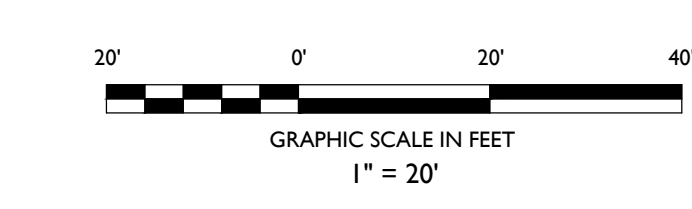


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IRRIGATION NOTE:
IRRIGATION CONTRACTOR TO PROVIDE A DESIGN FOR AN IRRIGATION SYSTEM SEPARATING PLANTING BEDS FROM LAWN AREA. PRIOR TO CONSTRUCTION, DESIGN IS TO BE SUBMITTED TO THE PROJECT LANDSCAPE DESIGNER FOR REVIEW AND APPROVAL. WHERE POSSIBLE, DRIP IRRIGATION AND OTHER WATER CONSERVATION TECHNIQUES SUCH AS RAIN SENSORS SHALL BE IMPLEMENTED. CONTRACTOR TO VERIFY MAXIMUM ON SITE DYNAMIC WATER PRESSURE AVAILABLE MEASURED IN PSI. PRESSURE REDUCING DEVICES OR BOOSTER PUMPS SHALL BE PROVIDED TO MEET SYSTEM PRESSURE REQUIREMENTS. DESIGN TO SHOW ALL VALVES, PIPING, HEADS, BACKFLOW PREVENTION, METERS, CONTROLLERS, AND SLEEVES WITHIN HARDSCAPE AREAS.

LANDSCAPING NOTES

1. THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AND LANDSCAPED AREAS TO MATCH EXISTING CONDITIONS UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
2. THE CONTRACTOR SHALL RESTORE ALL DISTURBED LAWN AREAS WITH A MINIMUM 4 INCH LAYER OF TOPSOIL AND SEED.
3. THE CONTRACTOR SHALL RESTORE MULCH AREAS WITH A MINIMUM 3 INCH LAYER OF MULCH.
4. THE MAXIMUM SLOPE ALLOWABLE IN LANDSCAPE RESTORATION AREAS SHALL BE 3 FEET HORIZONTAL TO 1 FOOT VERTICAL (3:1 SLOPE) UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
5. THE CONTRACTOR IS REQUIRED TO LOCATE ALL SPRINKLER HEADS IN AREA OF LANDSCAPING DISTURBANCE PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL RELOCATE SPRINKLER HEADS AND LINES IN ACCORDANCE WITH OWNER'S DIRECTION WITHIN AREAS OF DISTURBANCE.
6. THE CONTRACTOR SHALL ENSURE THAT ALL DISTURBED LANDSCAPED AREAS ARE GRADED TO MEET FLUSH AT THE ELEVATION OF WALKWAYS AND TOP OF CURB ELEVATIONS EXCEPT UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET. NO ABRUPT CHANGES IN GRADE ARE PERMITTED IN DISTURBED LANDSCAPING AREAS.



NO.	DATE	ISSUE	BY	DESCRIPTION
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			JV	MUNICIPAL SUBMISSION - SITE PLAN REVIEW

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SITE PLAN

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PROPOSED BANK WITH
DRIVE-THRU ATM

MAP: 14 LOT: 13
165 NEWBURYPORT TURNPIKE (US ROUTE 1)
TOWN OF ROWLEY
ESSEX COUNTY, MASSACHUSETTS

JOSHUA H. KLINE, P.E.
MASSACHUSETTS LICENSE NO. 53936
LICENSED PROFESSIONAL ENGINEER

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SCALE: 1" = 20' PROJECT ID: BOS-230034

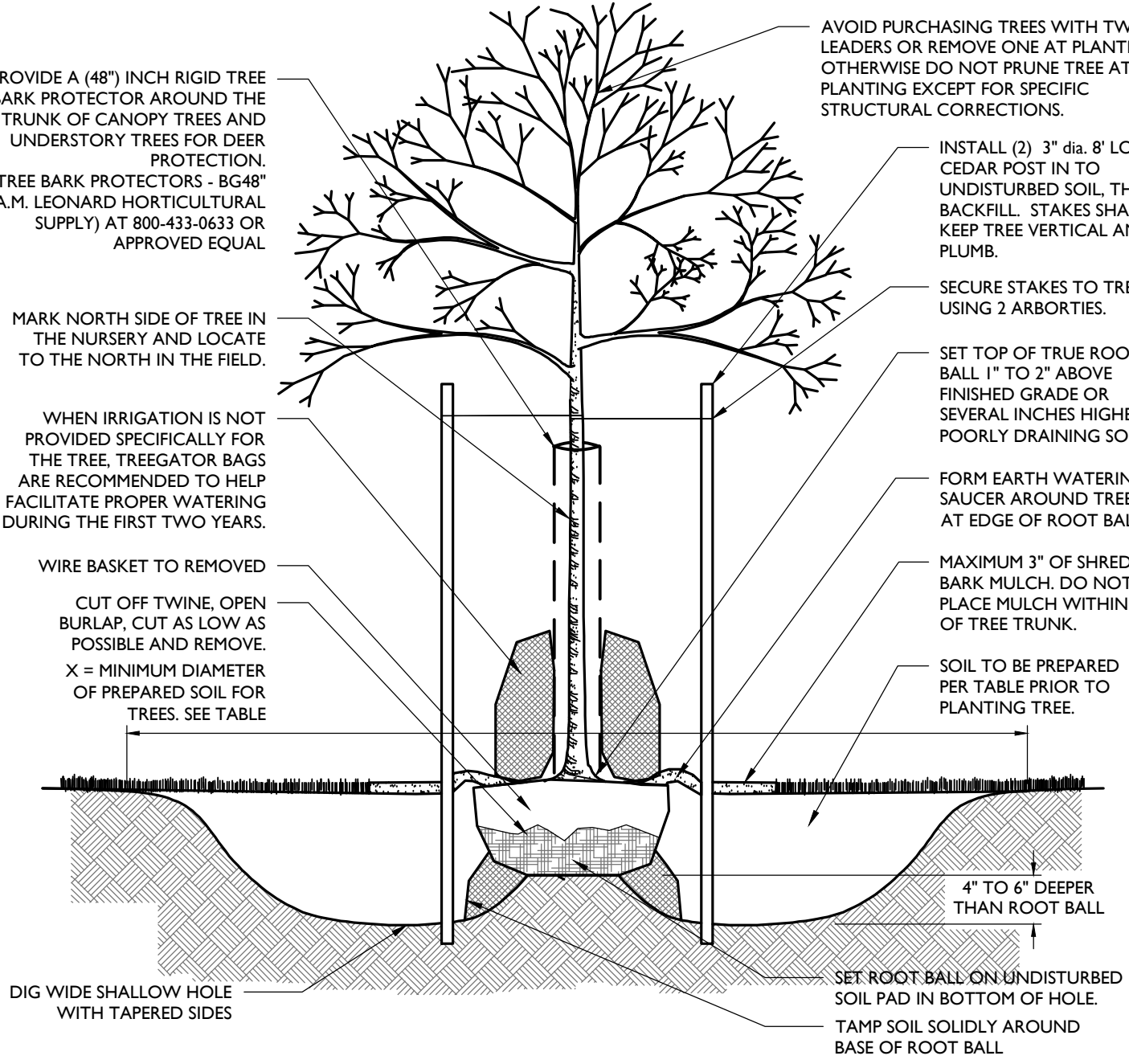
TITLE:
LANDSCAPING PLAN

DRAWING:
C-9

Z:\PROJECTS\2023\230034\CONSTR\165 NEWBURYPORT TURNPIKE ROWLEY MA CAD\DWG\TOP\LAND.DWG

NOTES:

- 1. FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL...

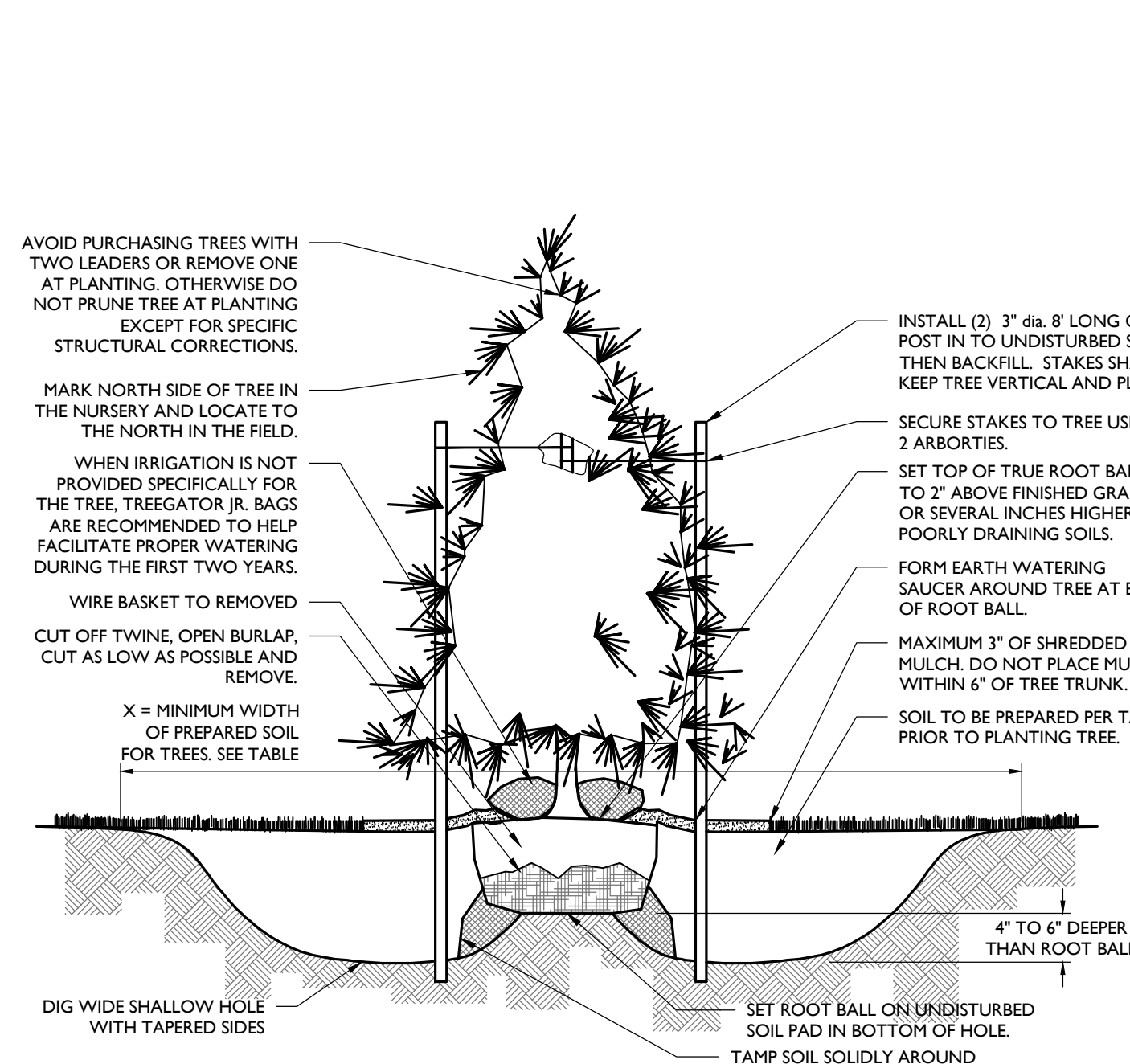


DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

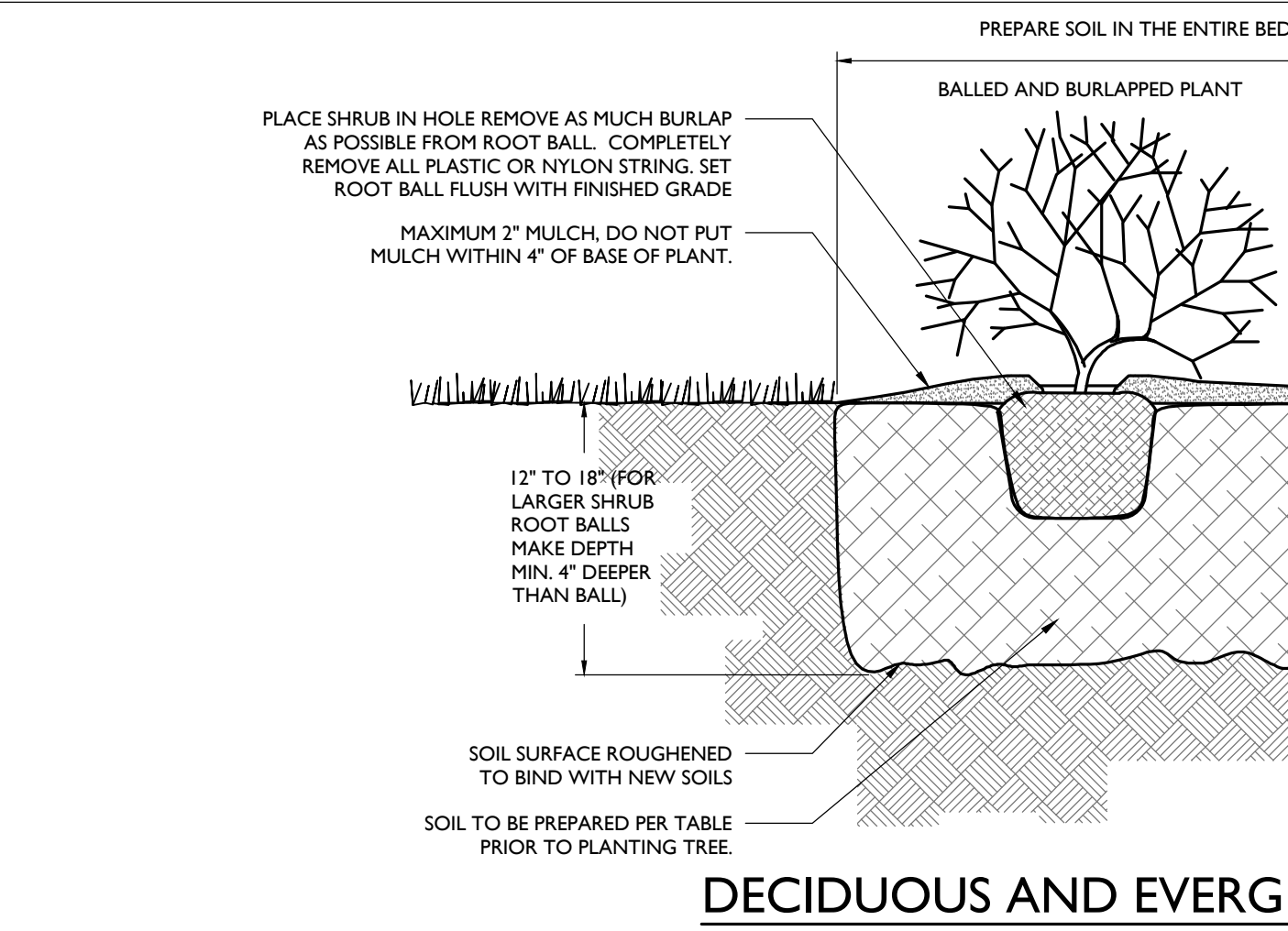
NOTES:

- 1. FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL...



CONIFEROUS TREE PLANTING DETAIL

NOT TO SCALE

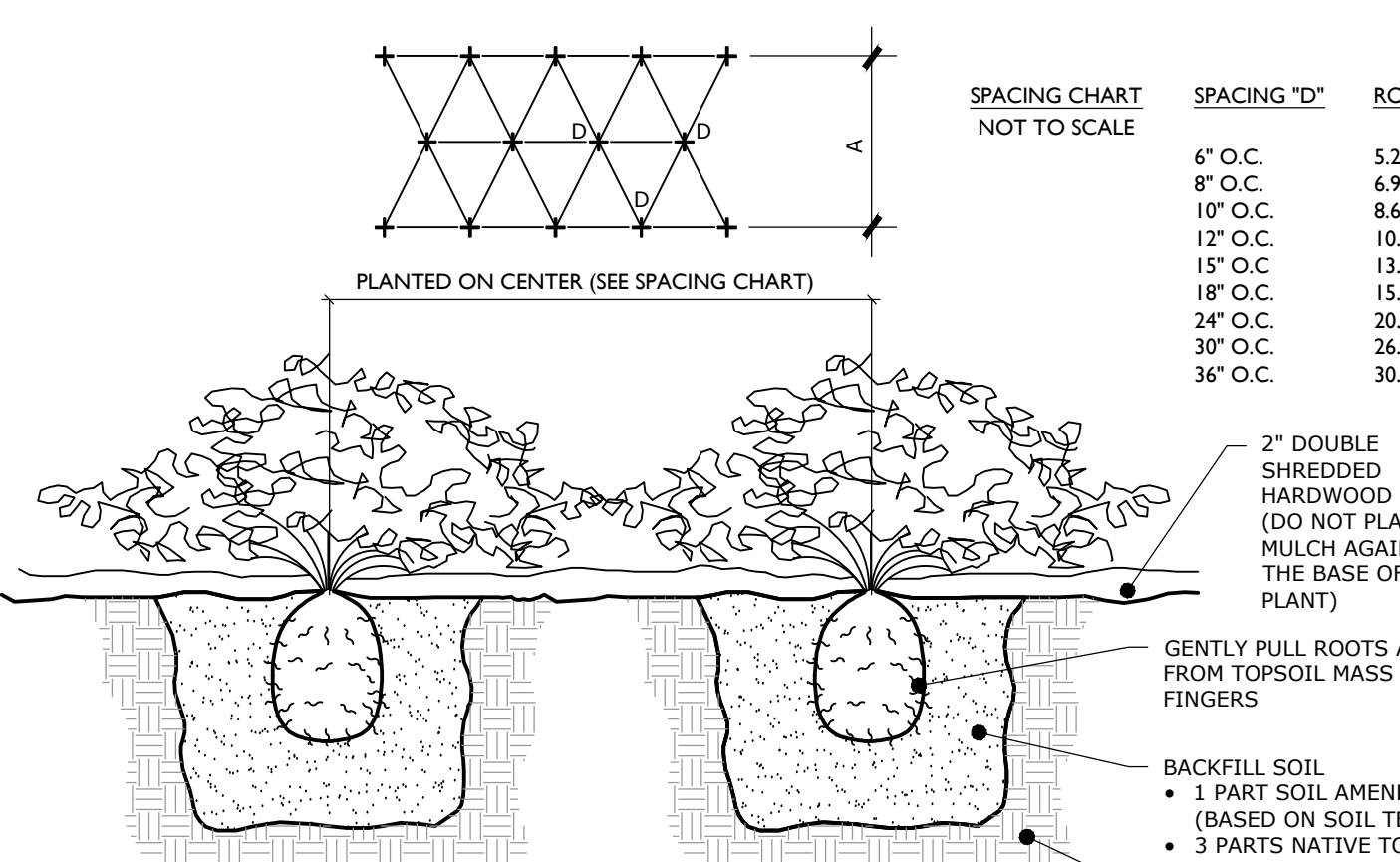


DECIDUOUS AND EVERGREEN SHRUB PLANTING DETAIL

NOT TO SCALE

NOTES:

- 1. THOROUGHLY SOAK THE GROUND COVER ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING...

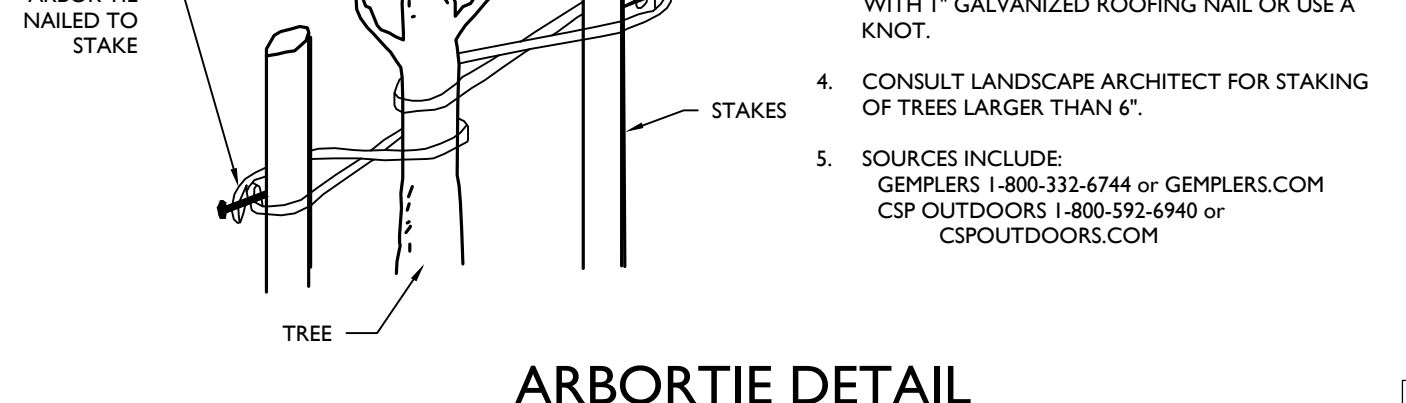


GROUND COVER/PERENNIAL/ANNUAL PLANTING DETAIL

NOT TO SCALE

NOTES:

- 1. THOROUGHLY SOAK THE GROUND COVER ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING...



ARBORTIE DETAIL

NOT TO SCALE

GENERAL LANDSCAPING NOTES:

- 1. THE LANDSCAPE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK IN ACCORDANCE WITH THESE SPECIFICATIONS, APPROVED OR FINAL DRAWINGS, AND INSTRUCTIONS PROVIDED BY THE PROJECT LANDSCAPE DESIGNER...

PROTECTION OF EXISTING VEGETATION NOTES:

- 1. BEFORE COMMENCING WORK, ALL EXISTING VEGETATION WHICH COULD BE IMPACTED AS A RESULT OF THE PROPOSED CONSTRUCTION ACTIVITIES MUST BE PROTECTED FROM DAMAGE BY THE INSTALLATION OF TREE PROTECTION FENCING...

SOIL PREPARATION AND MULCH NOTES:

- 1. LANDSCAPE CONTRACTOR SHALL OBTAIN A SOIL TEST OF THE IN-SITU TOPSOIL BY A CERTIFIED SOIL LABORATORY PRIOR TO PLANTING...

- 1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR (1 YR) FROM APPROVAL OF LANDSCAPE INSTALLATION...

Table with 3 columns: SIZE AT PLANTING, IRRIGATION FOR VITALITY, IRRIGATION FOR SURVIVAL. Rows include <2" CALIPER, 2"-4 CALIPER, 4"-6" CALIPER.

- 1. AT EACH IRRIGATION APPLY TWO TO THREE GALLONS PER INCH TRUNK CALIPER TO THE ROOT BALL SURFACE. APPLY IT IN A MANNER SO ALL WATER SOAKS THE ENTIRE ROOT BALL...

PLANT MATERIAL AND HANDLING NOTES:

- 1. ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004) OR LATEST REVISION AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION...

PLANT MATERIAL GUARANTEE NOTES:

- 1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR (1 YR) FROM APPROVAL OF LANDSCAPE INSTALLATION...

LAWN (SEED OR SOD) NOTES:

- 1. SEED MIXTURE SHALL BE FRESH, CLEAN, NEW CROP SEED. SOD SHALL BE STRONGLY ROOTED, UNIFORM IN THICKNESS, AND FREE OF WEEDS, DISEASE, AND PESTS...

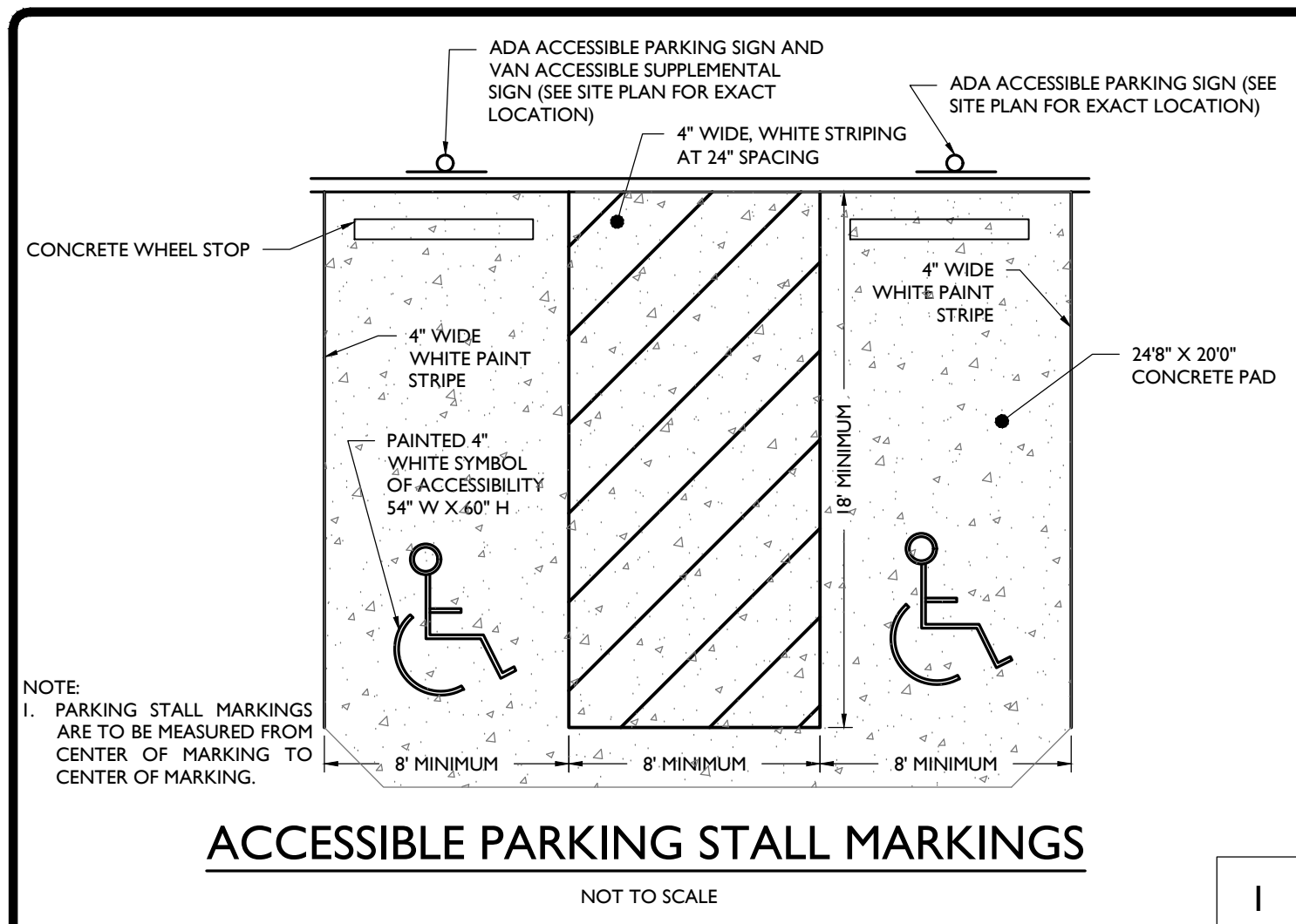
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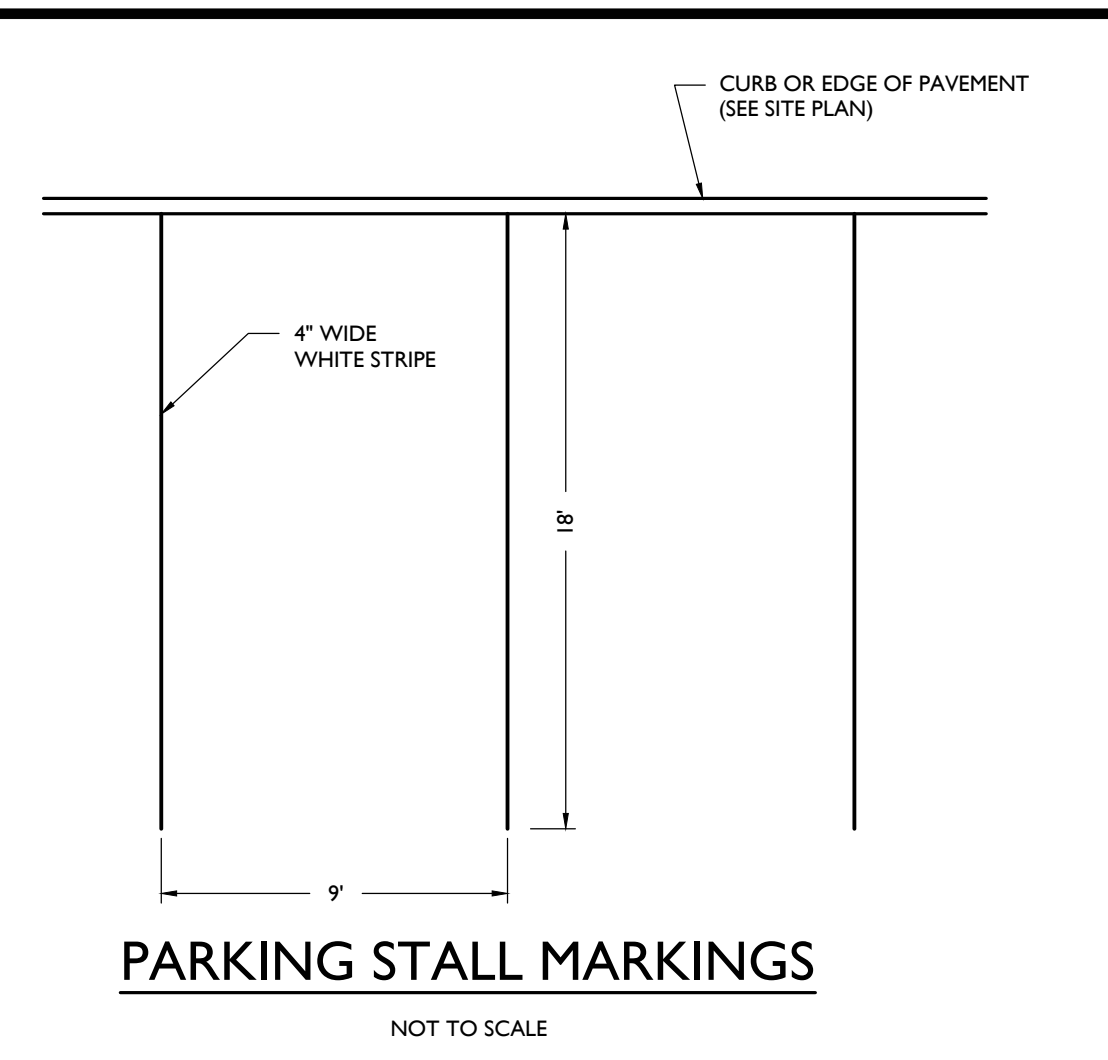
CHASED PROPOSED BANK WITH DRIVE-THRU ATM logo and address: MAP: 1410E, 13 1/2 NEWBURYPORT TURNPIKE (US ROUTE 1) TOWN OF ROWLEY, ESSEX COUNTY, MASSACHUSETTS.

STONEFIELD engineering & design logo and contact information: JOSHUA H. KLINE, P.E. MASSACHUSETTS LICENSE NO. 53936. SCALE: AS SHOWN PROJECT ID: BOS-230034. DRAWING: LANDSCAPING DETAILS. C-10



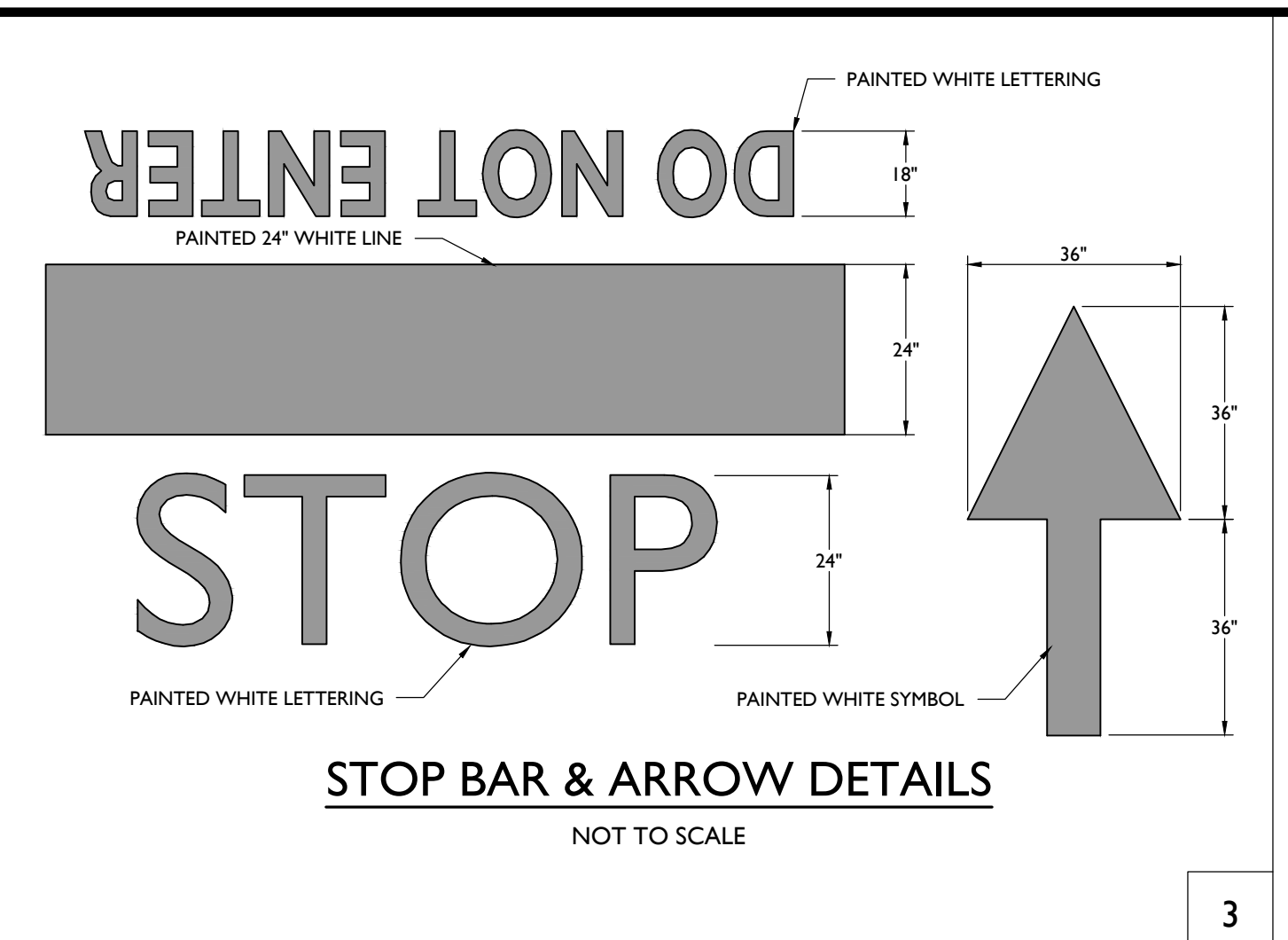
ACCESSIBLE PARKING STALL MARKINGS
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1



PARKING STALL MARKINGS
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2

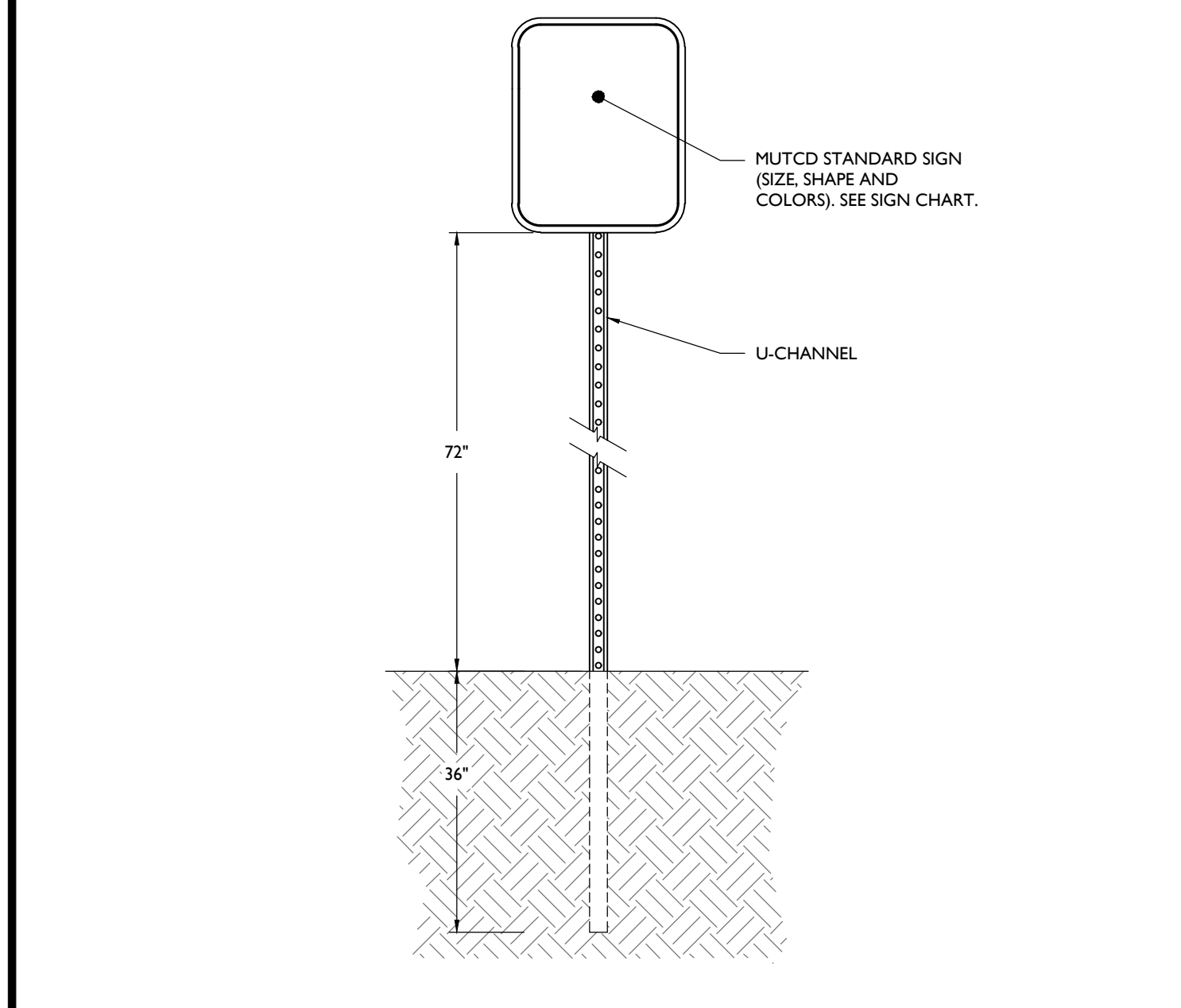


STOP BAR & ARROW DETAILS
NOT TO SCALE

3

- PAVEMENT STRIPING & MARKINGS NOTES:**
1. ALL SIGNING AND STRIPING IN EXISTING CONDITION IN CONFLICT WITH THE PROPOSED DESIGN PLAN SHALL BE REMOVED.
 2. ALL PROPOSED SIGNING AND STRIPING SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
 3. PAVEMENT STRIPING AND MARKINGS SHALL BE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL, COUNTY AND STATE REQUIREMENTS.
 4. UNLESS OTHERWISE SPECIFIED, ALL STRIPING AND MARKINGS IN THE PUBLIC RIGHT-OF-WAY SHALL BE OF THERMOPLASTIC PAINT OR PERFORMED THERMOPLASTIC MARKINGS.
 5. UNLESS OTHERWISE SPECIFIED, ALL ON SITE STRIPING AND MARKINGS SHALL BE OF THERMOPLASTIC PAINT OR PERFORMED THERMOPLASTIC MARKINGS.

4

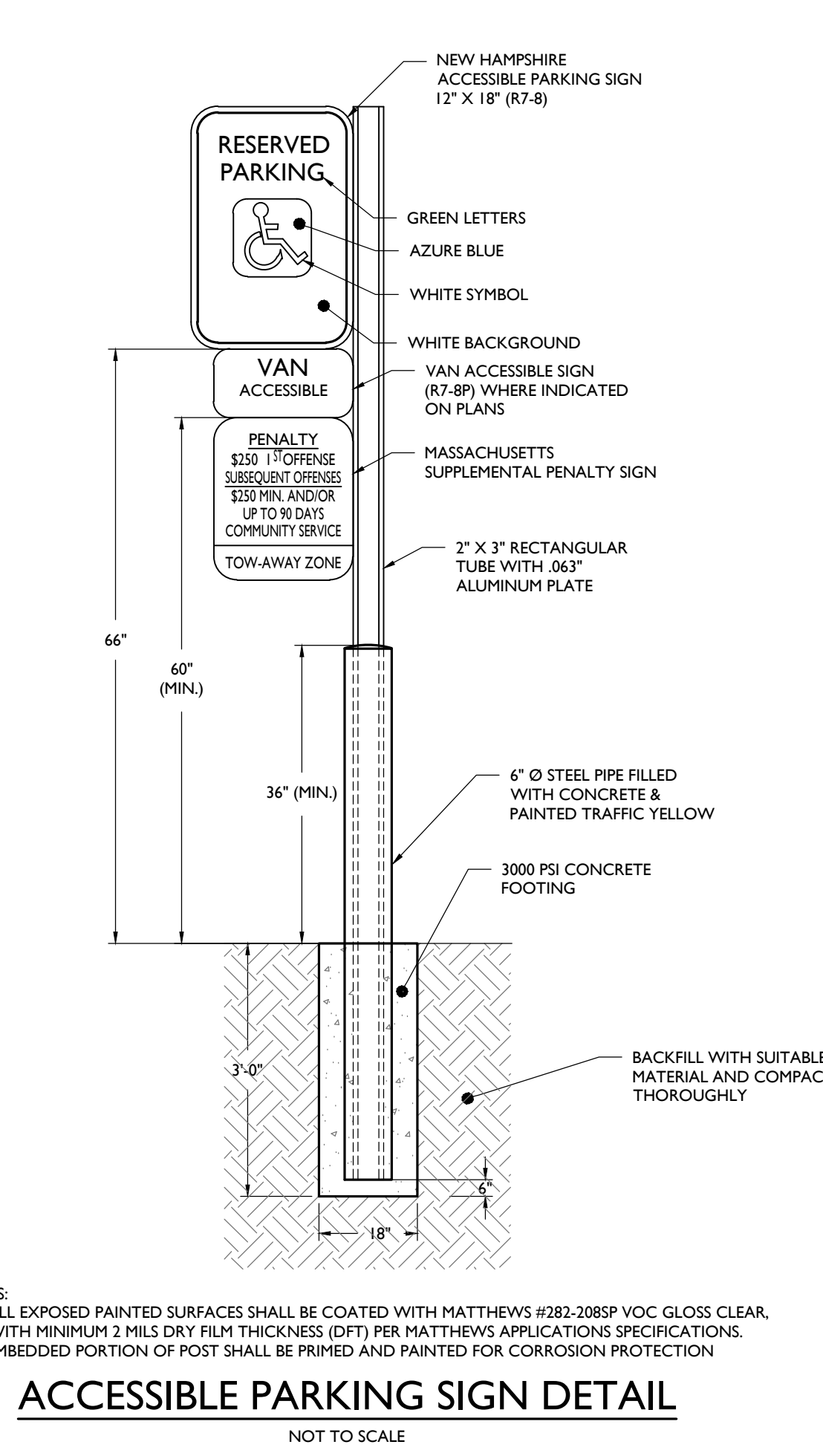


SIGN POST DETAIL & SIGN DATA TABLE
NOT TO SCALE

7

M.U.T.C.D. NUMBER	TEXT	COLOR		SIZE OF SIGN (WIDTH X HEIGHT)	TYPE OF MOUNT
		LEGEND	BACKGROUND		
STOP SIGN (R1-1)		RED	WHITE	36"x36"	GROUND
DO NOT ENTER (R5-1)		RED	WHITE	30"x30"	GROUND

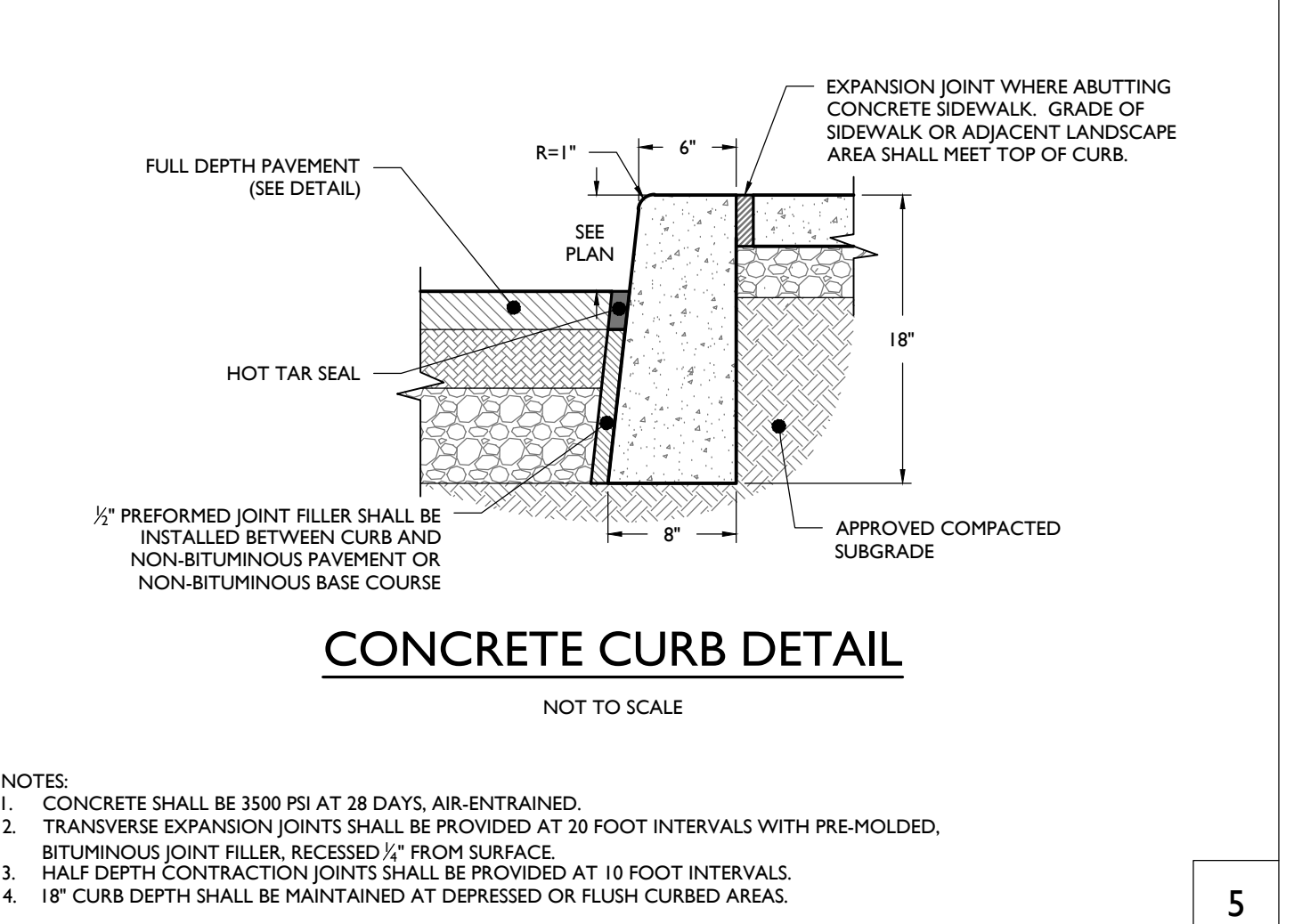
- NOTE:**
1. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), EXCEPT AS NOTED.
 2. ALL SIGNS SHALL BE MOUNTED AS TO NOT OBSTRUCT THE SHAPE OF "STOP" (R1-1) AND "YIELD" (R1-2) SIGNS.



ACCESSIBLE PARKING SIGN DETAIL
NOT TO SCALE

8

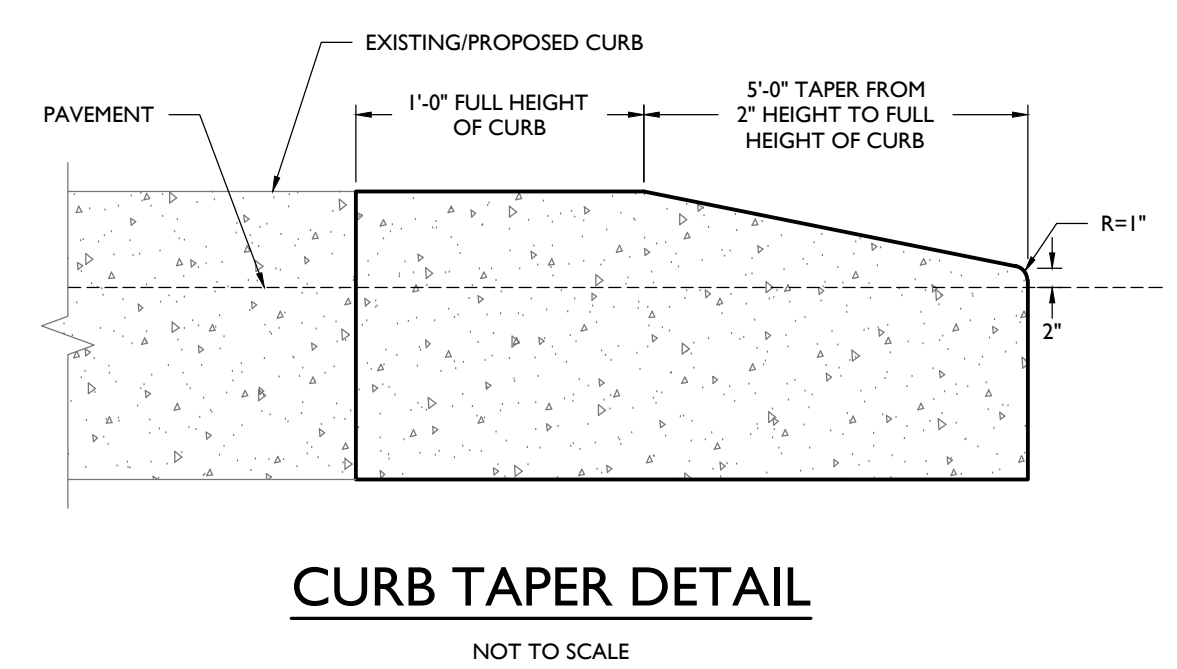
- NOTES:**
1. ALL EXPOSED PAINTED SURFACES SHALL BE COATED WITH MATTHEWS #282-2085P VOC GLOSS CLEAR, WITH MINIMUM 2 MILS DRY FILM THICKNESS (DFT) PER MATTHEWS APPLICATIONS SPECIFICATIONS.
 2. EMBEDDED PORTION OF POST SHALL BE PRIMED AND PAINTED FOR CORROSION PROTECTION.



CONCRETE CURB DETAIL
NOT TO SCALE

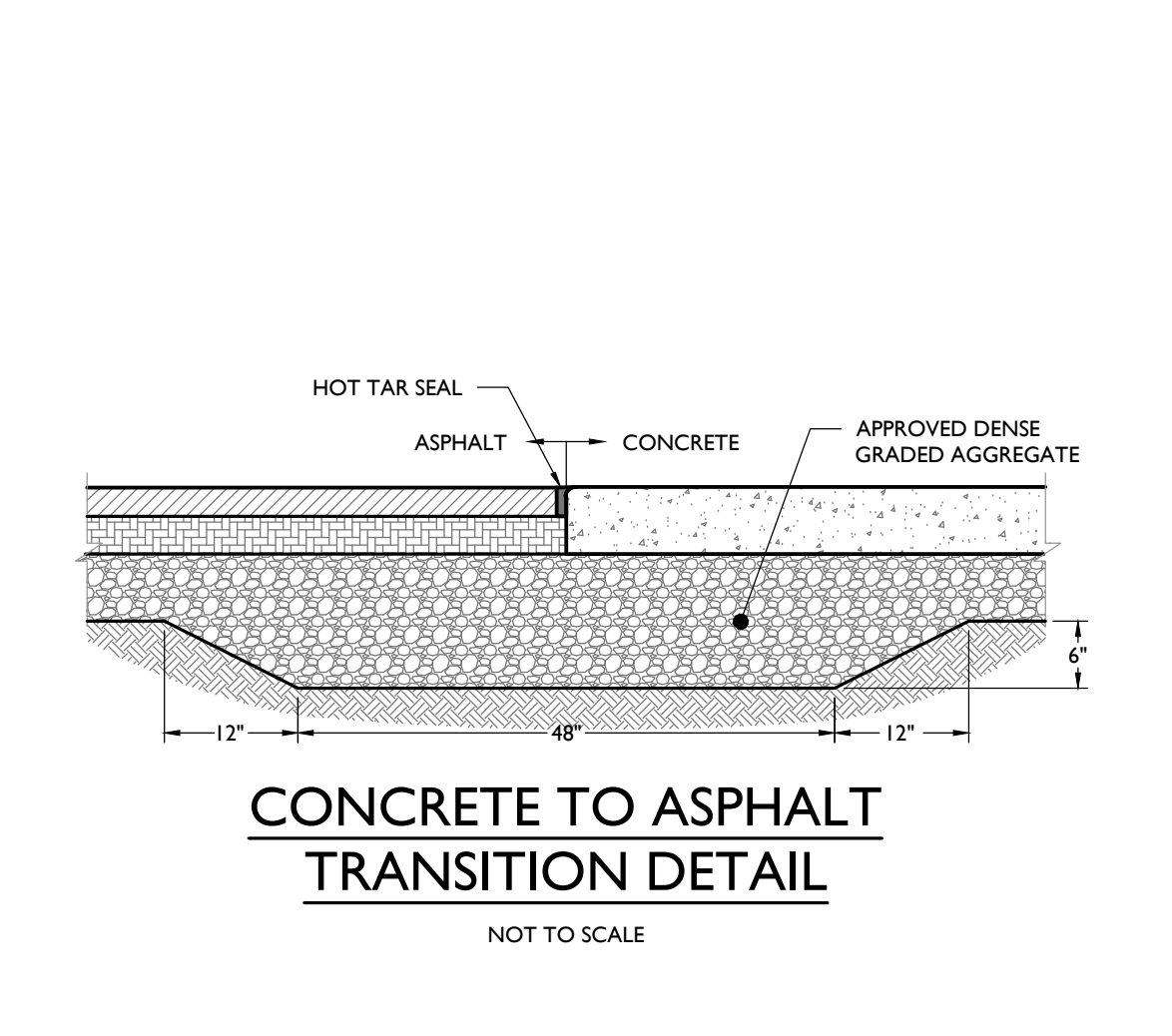
5

- NOTES:**
1. CONCRETE SHALL BE 3500 PSI AT 28 DAYS, AIR-ENTRAINED.
 2. TRANSVERSE EXPANSION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM SURFACE.
 3. HALF DEPTH CONTRACTION JOINTS SHALL BE PROVIDED AT 10 FOOT INTERVALS.
 4. 18" CURB DEPTH SHALL BE MAINTAINED AT DEPRESSED OR FLUSH CURBED AREAS.



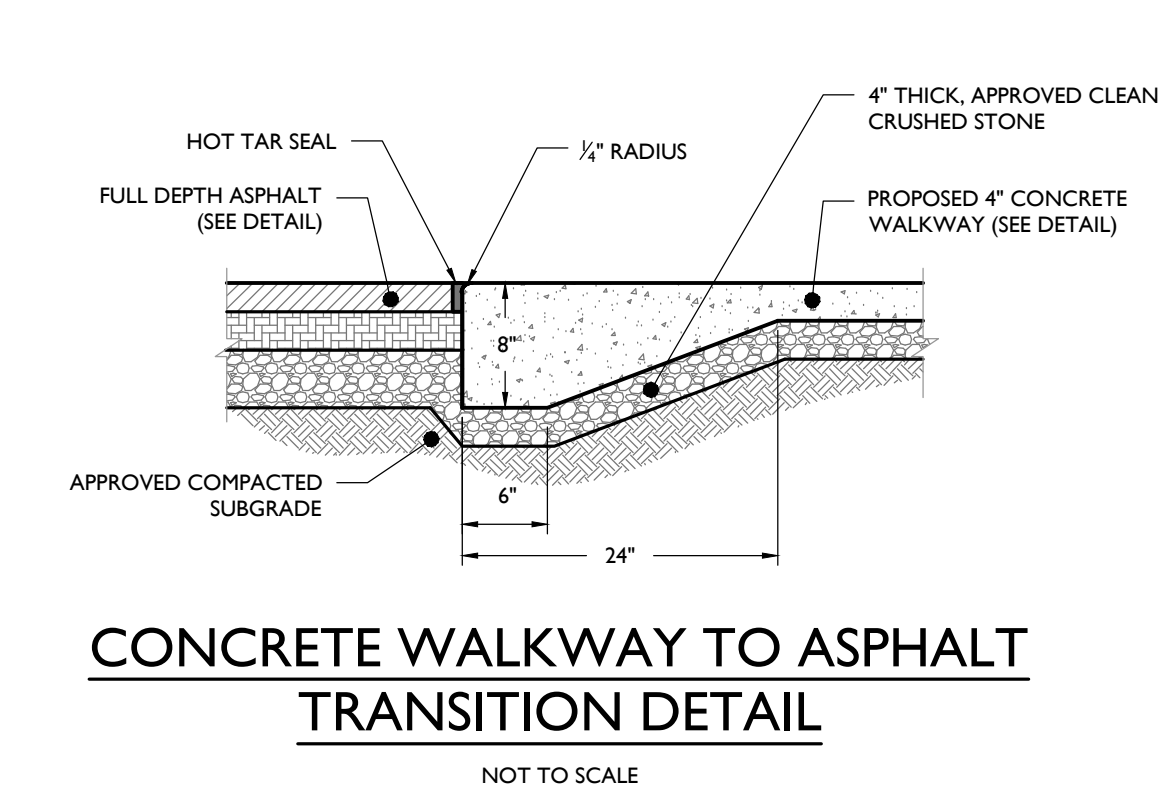
CURB TAPER DETAIL
NOT TO SCALE

9



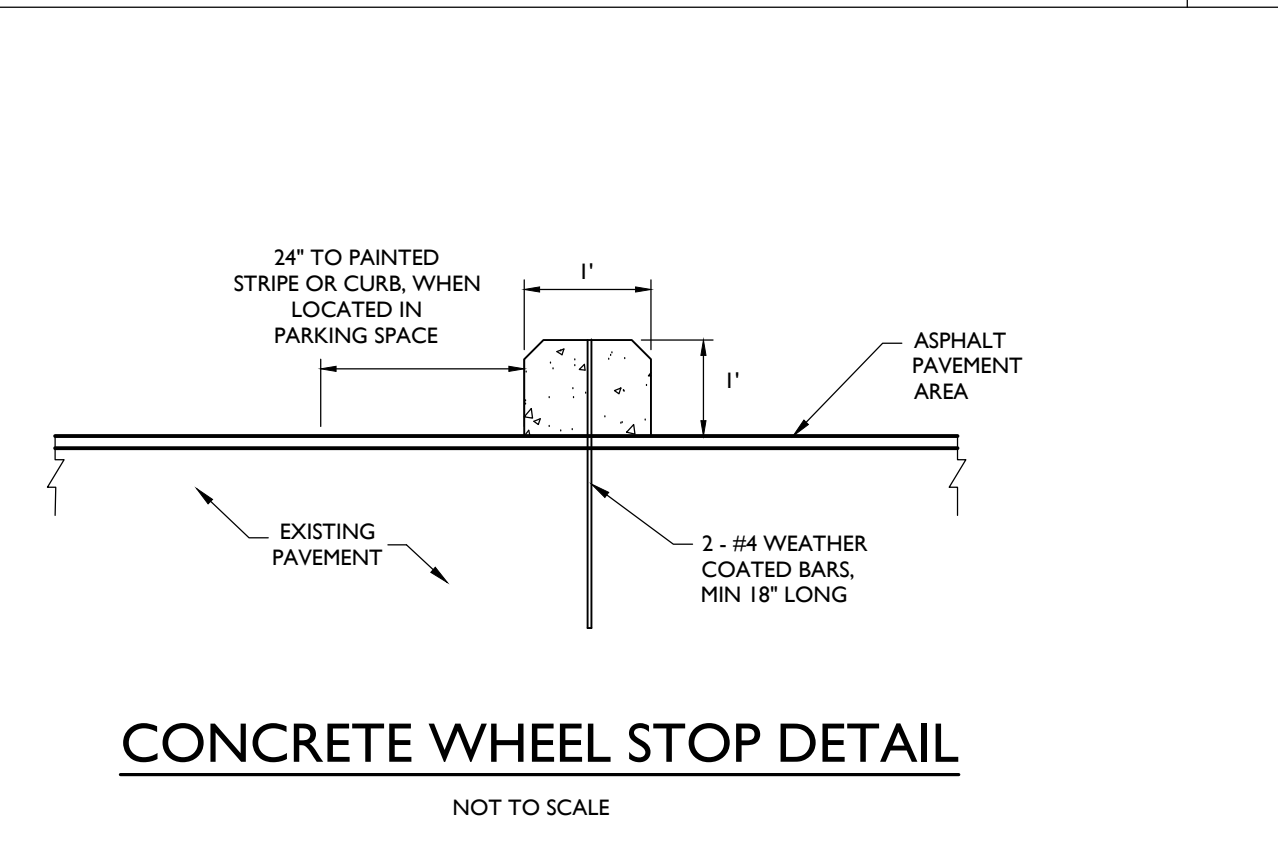
CONCRETE TO ASPHALT TRANSITION DETAIL
NOT TO SCALE

6



CONCRETE WALKWAY TO ASPHALT TRANSITION DETAIL
NOT TO SCALE

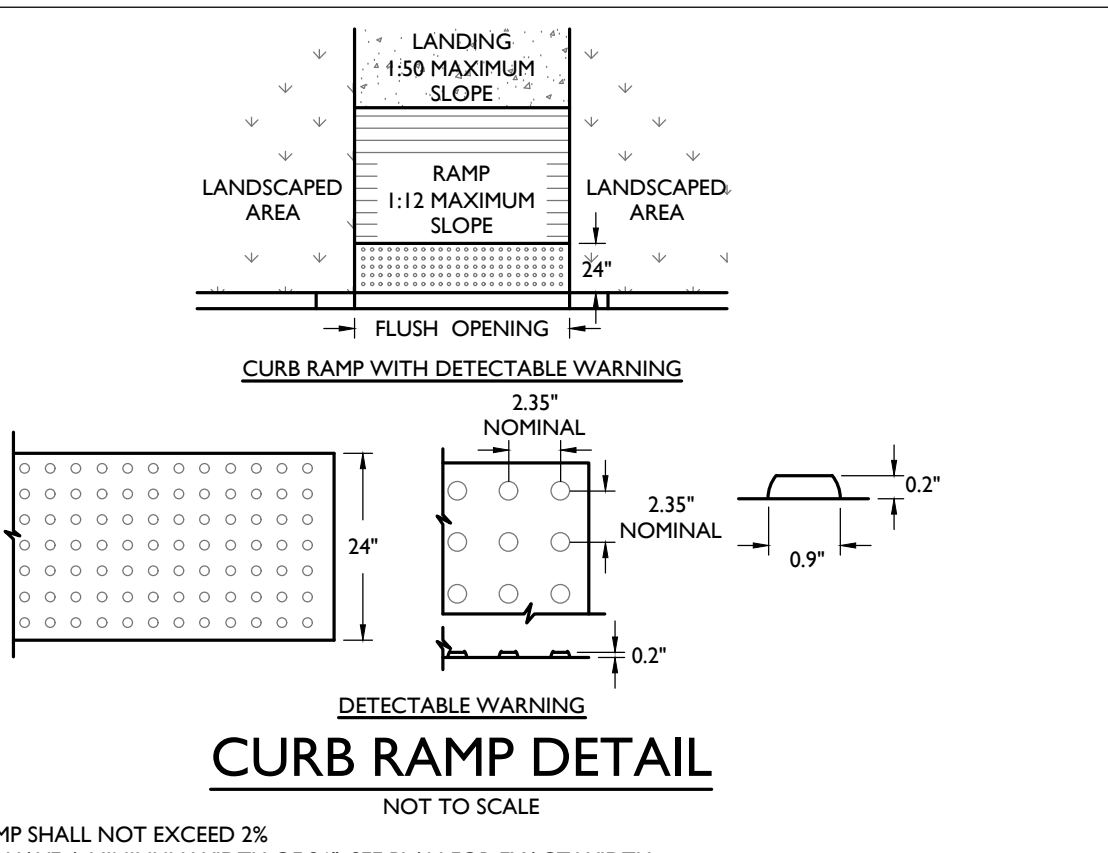
10



CONCRETE WHEEL STOP DETAIL
NOT TO SCALE

11

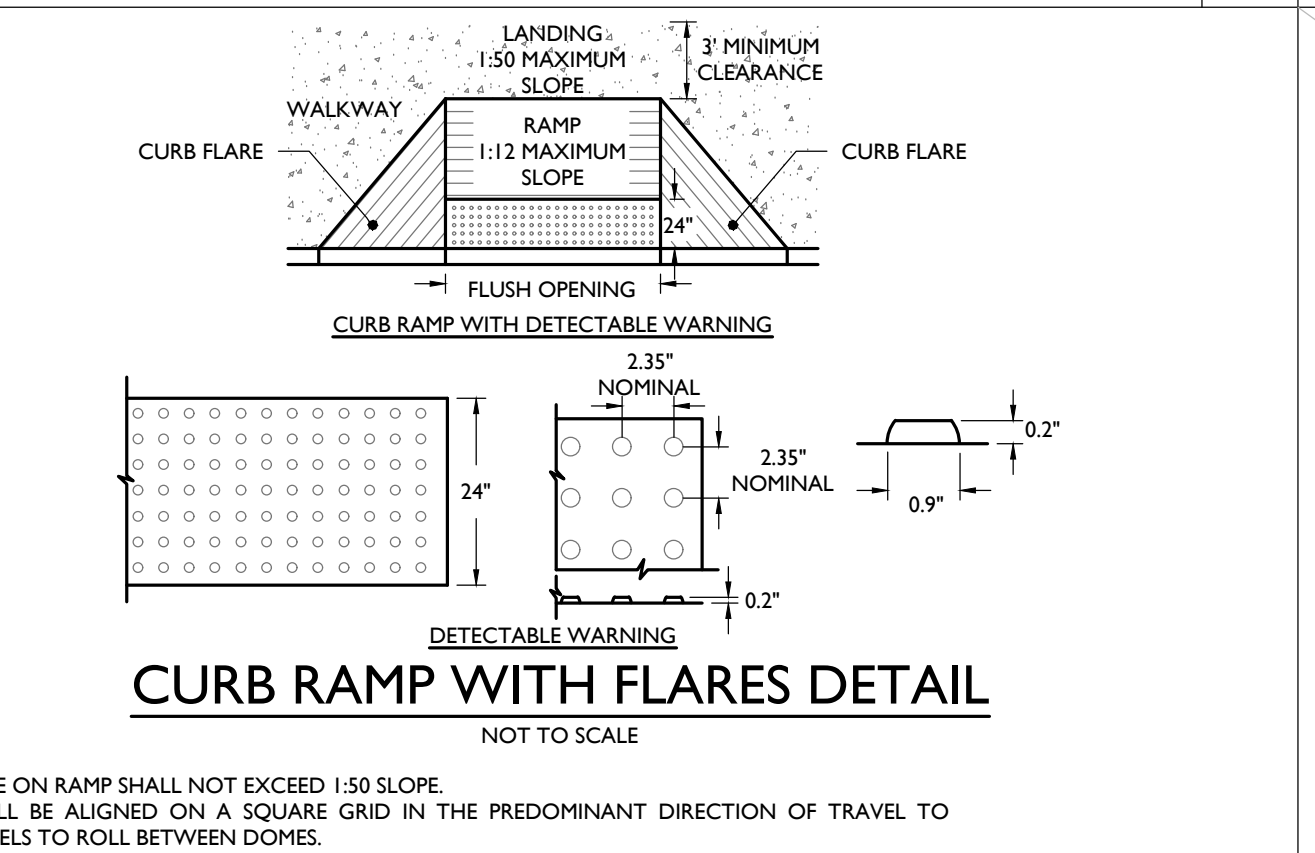
- NOTES:**
1. ON CONCRETE PAVEMENT, SECURE WHEEL STOP WITH EPOXY BONDING AGENT.
 2. WHEEL STOP SHALL BE 6' LONG.
 3. WHEEL STOP SHALL BE PREFABRICATED CONCRETE.



CURB RAMP DETAIL
NOT TO SCALE

12

- NOTES:**
1. CROSS SLOPE ON RAMP SHALL NOT EXCEED 2%.
 2. A FLUSH CURB SHALL HAVE A MINIMUM WIDTH OF 36"; SEE PLAN FOR EXACT WIDTH.
 3. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
 4. VISUAL CONTRAST: THERE SHALL BE A MINIMUM OF 70% CONTRAST IN LIGHT REFLECTANCE BETWEEN THE DETECTABLE WARNING AND AN ADJOINING SURFACE.
 5. DETECTABLE WARNING STRIP REQUIRED WHERE RAMP DIRECTS PEDESTRIAN TRAFFIC TOWARDS VEHICLE TRAVEL WAY. WARNING STRIP SHALL BE CAST-IN-PLACE.
 6. RAMP SHALL HAVE A MAXIMUM RISE OF 6" WITHOUT A HANDRAIL.



CURB RAMP WITH FLARES DETAIL
NOT TO SCALE

13

- NOTES:**
1. CROSS SLOPE ON RAMP SHALL NOT EXCEED 1:50 SLOPE.
 2. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
 3. VISUAL CONTRAST: THERE SHALL BE A MINIMUM OF 70% CONTRAST IN LIGHT REFLECTANCE BETWEEN THE DETECTABLE WARNING AND AN ADJOINING SURFACE.
 4. DETECTABLE WARNING STRIP REQUIRED WHERE RAMP DIRECTS PEDESTRIAN TRAFFIC TOWARDS VEHICLE TRAVEL WAY. WARNING STRIP SHALL BE CAST-IN-PLACE.
 5. WHERE A 60" X 60" LANDING EXISTS AT THE TOP OF RAMP, RAMP FLARE SHALL NOT EXCEED 1:10 SLOPE. WHERE LANDING IS NOT PROVIDED RAMP FLARE SHALL NOT EXCEED 1:12 SLOPE.
 6. A FLUSH CURB SHALL HAVE A MINIMUM WIDTH OF 36"; SEE PLAN FOR EXACT WIDTH.
 7. RAMP SHALL HAVE A MAXIMUM RISE OF 6" WITHOUT A HANDRAIL.

NO.	DATE	ISSUE	BY	DESCRIPTION
02	03/29/2024	01	JV	MUNICIPAL RESUBMISSION - SIGNAGE
			JV	MUNICIPAL SUBMISSION - SITE PLAN REVIEW

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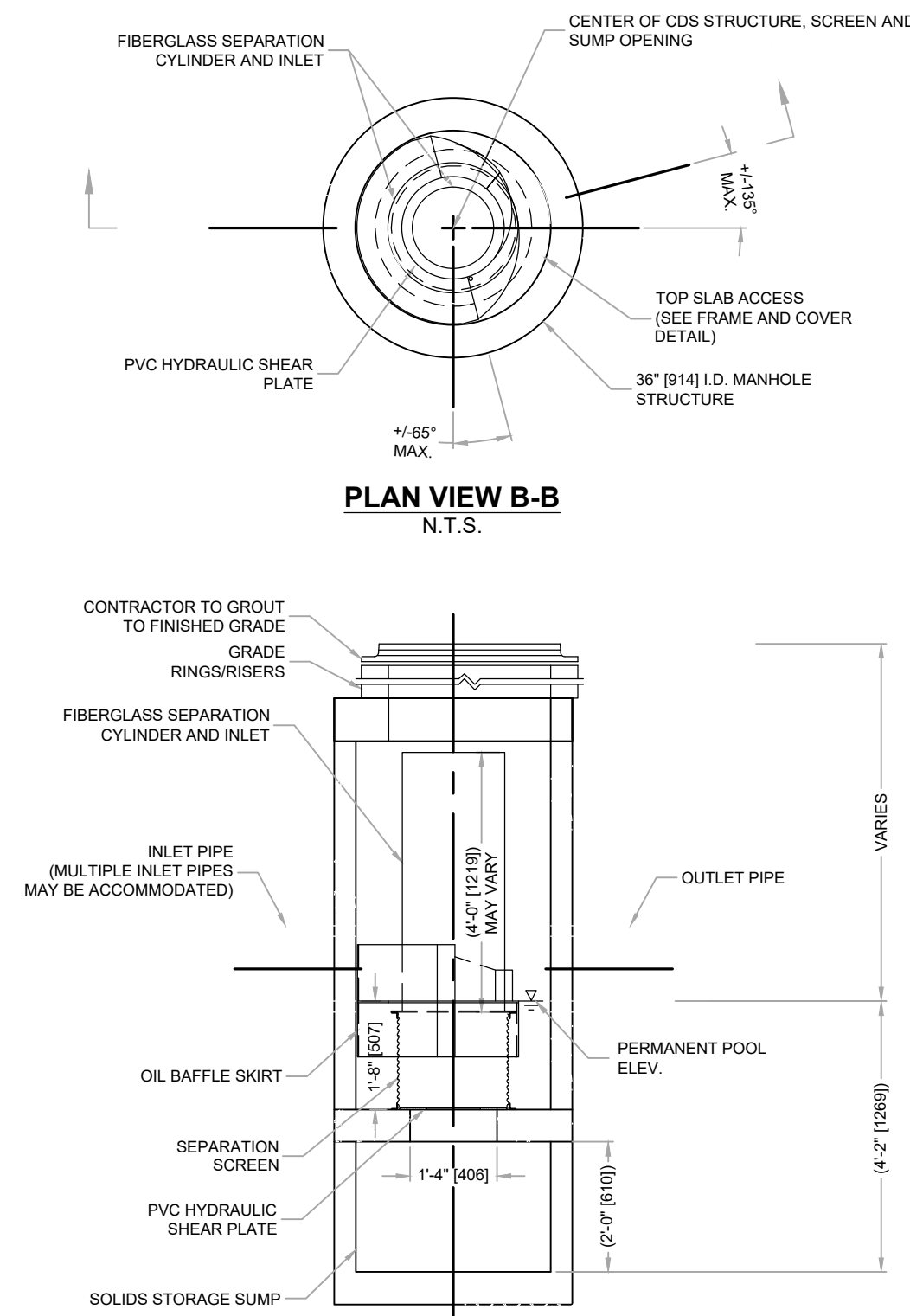
MAP: 14 LOT: 13
165 NEWBURYPORT TURNPIKE (US ROUTE 1)
TOWN OF ROWLEY
ESSEX COUNTY, MASSACHUSETTS

JOSHUA H. KLINE, P.E.
MASSACHUSETTS LICENSE NO. 53936
LICENSED PROFESSIONAL ENGINEER

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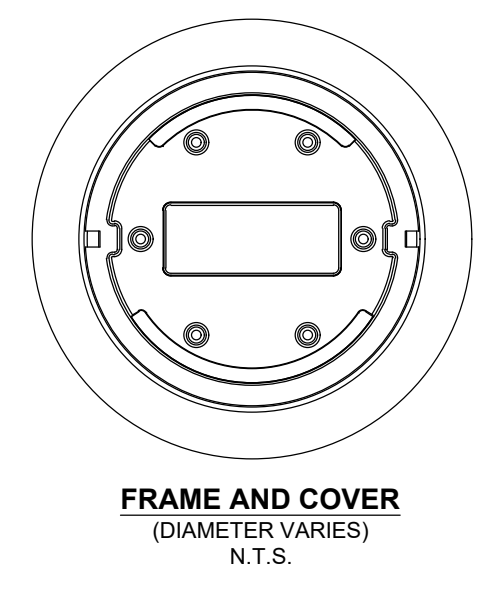
SCALE: AS SHOWN PROJECT ID: BOS-230034
TITLE:
**CONSTRUCTION
DETAILS**
DRAWING:
C-11

Z:\PROJECTS\2023\230034\CONSTR.DWG - 165 NEWBURYPORT TURNPIKE ROWLEY MA CAD\DWG\CONSTR.DWG



CONTECH CDS1515 (WQ-1 & WQ-2) DETAIL
NOT TO SCALE

CDS1515-3-C DESIGN NOTES
CDS1515-3-C RATED TREATMENT CAPACITY IS 1.0 CFS, OR PER LOCAL REGULATIONS. THE STANDARD CDS1515-3-C CONFIGURATION IS SHOWN.



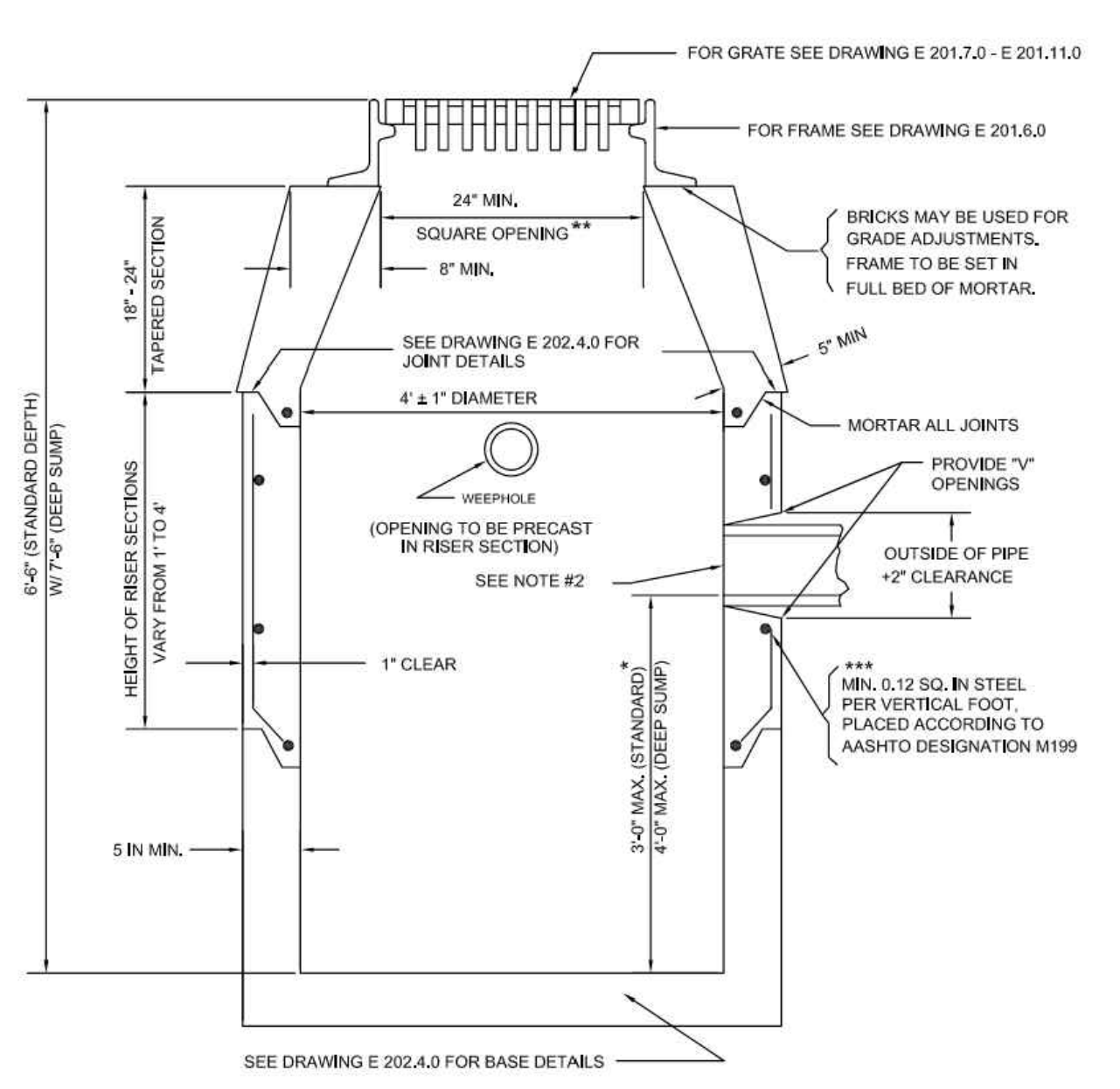
SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	-
WATER QUALITY FLOW RATE (CFS OR L/s)	-
PEAK FLOW RATE (CFS OR L/s)	-
RETURN PERIOD OF PEAK FLOW (YRS)	-
SCREEN APERTURE (2400 OR 4700)	-
PIPE DATA:	I.E. MATERIAL DIAMETER
INLET PIPE 1	-
INLET PIPE 2	-
OUTLET PIPE	-
RIM ELEVATION	-
ANTI-FLOTATION BALLAST	WIDTH HEIGHT
NOTES/SPECIAL REQUIREMENTS:	-
* PER ENGINEER OF RECORD	

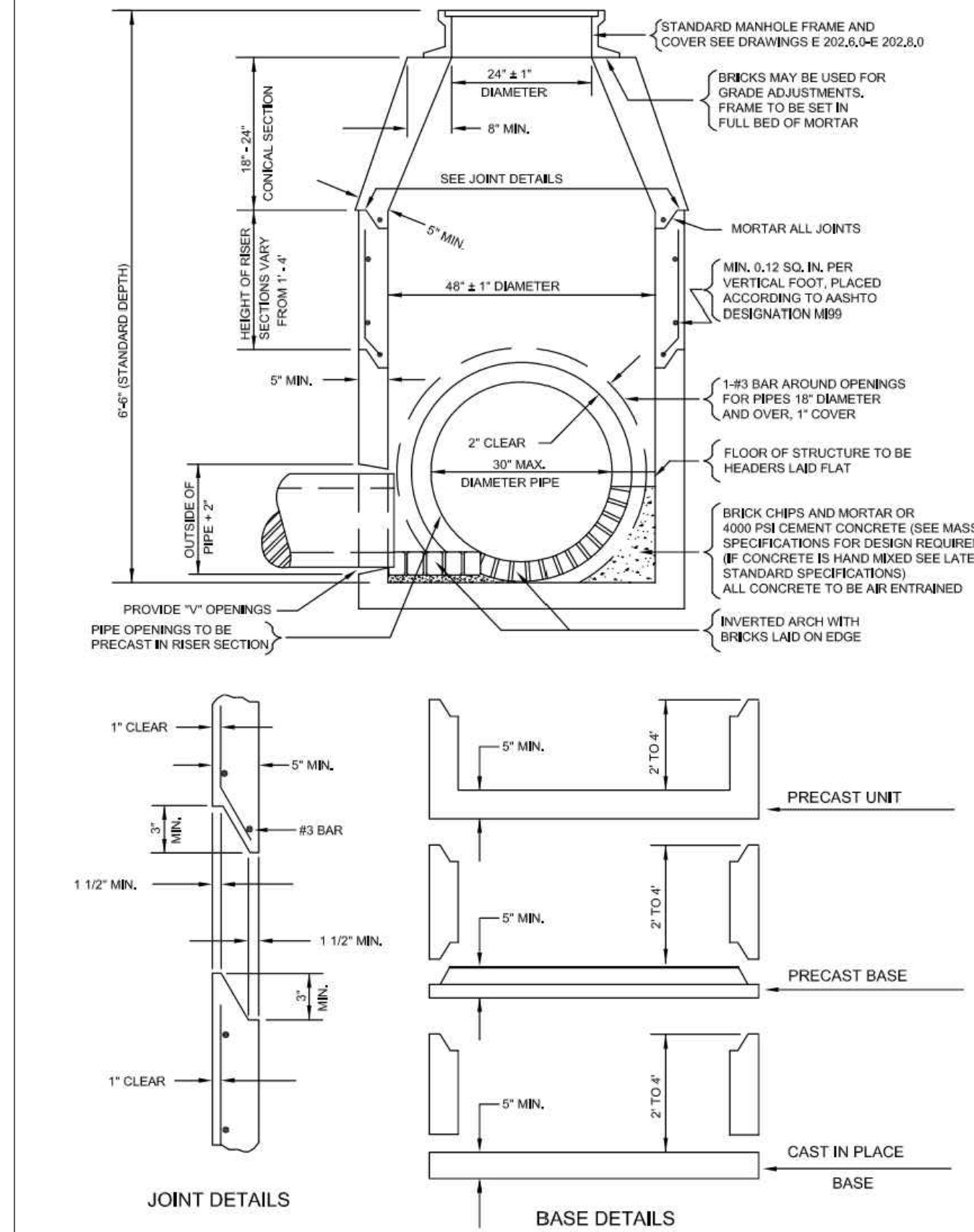
- GENERAL NOTES**
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
 - CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 - STRUCTURE SHALL MEET AASHTO H20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M208 AND BE CAST WITH THE CONTECH LOGO.
 - IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
 - CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.
- INSTALLATION NOTES**
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
9005 Centre Drive Dr., Suite 400, West Chester, OH 45399
937-338-1122 • 913-645-7000 • 913-645-1983 FAX

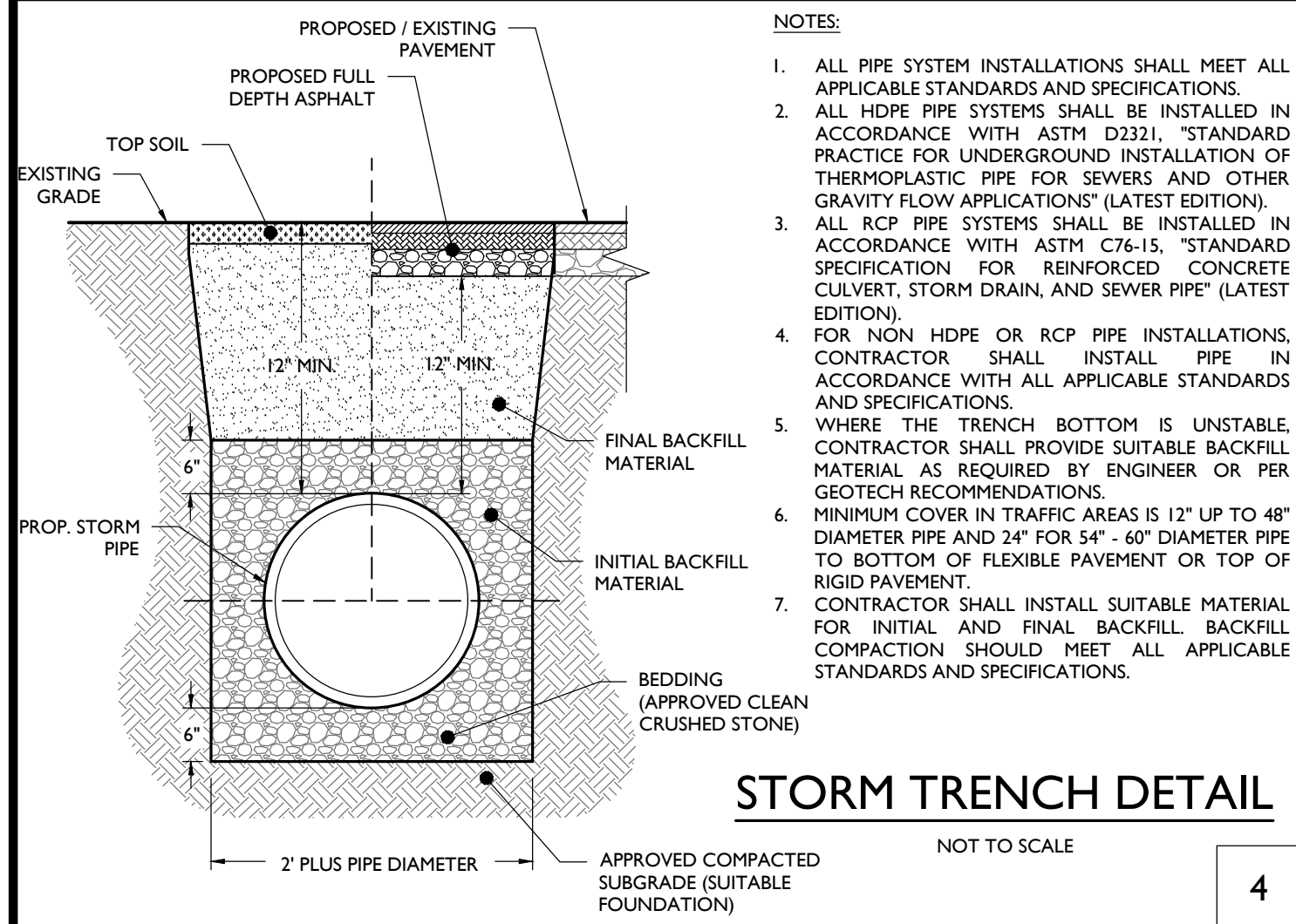
CDS1515-3-C
ONLINE CDS
STANDARD DETAIL



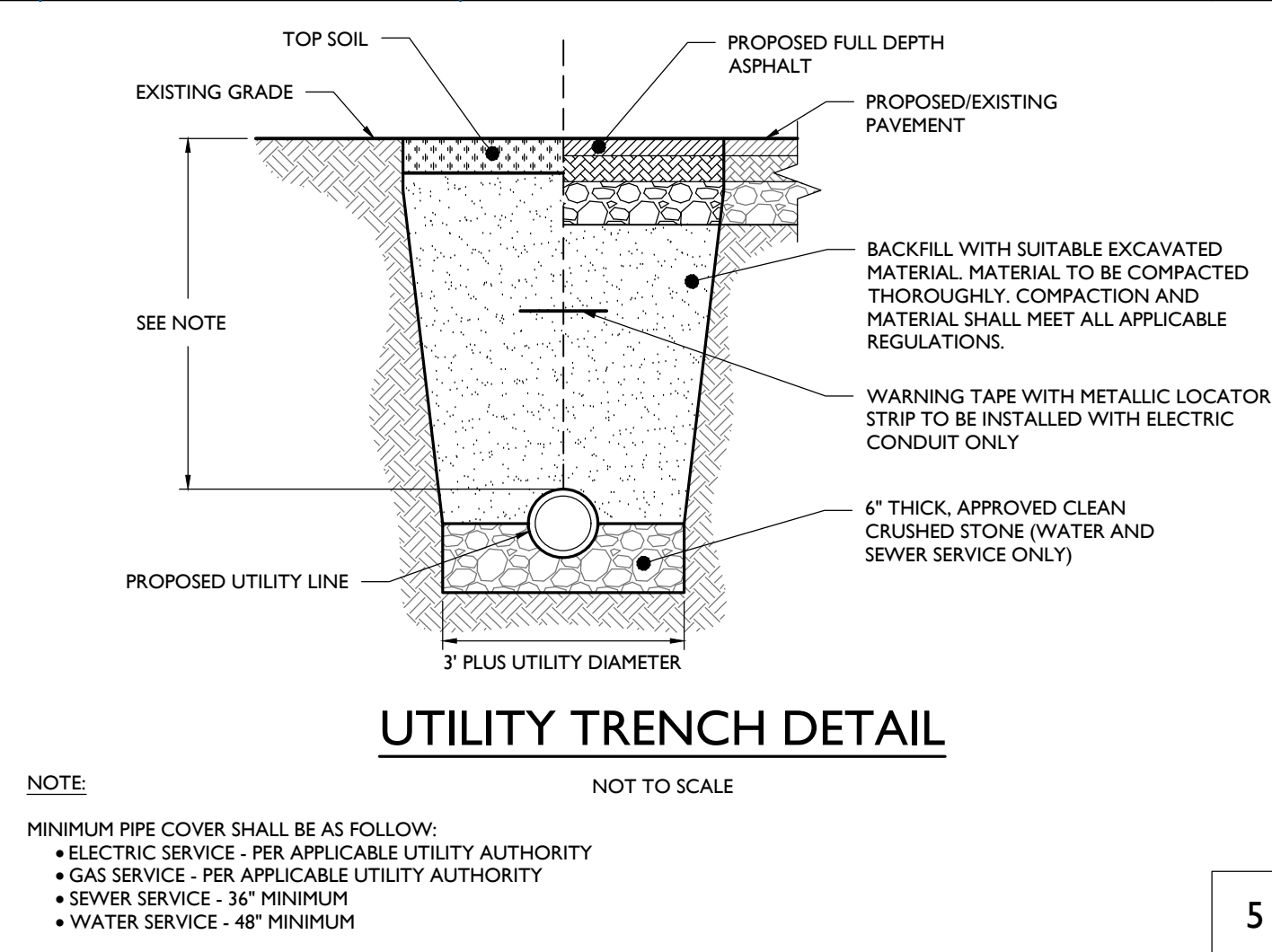
PRECAST CONCRETE CATCH BASIN DETAIL
NOT TO SCALE



PRECAST CONCRETE MANHOLE DETAIL
NOT TO SCALE



STORM TRENCH DETAIL
NOT TO SCALE



UTILITY TRENCH DETAIL
NOT TO SCALE

RIP-RAP SIZING CHART

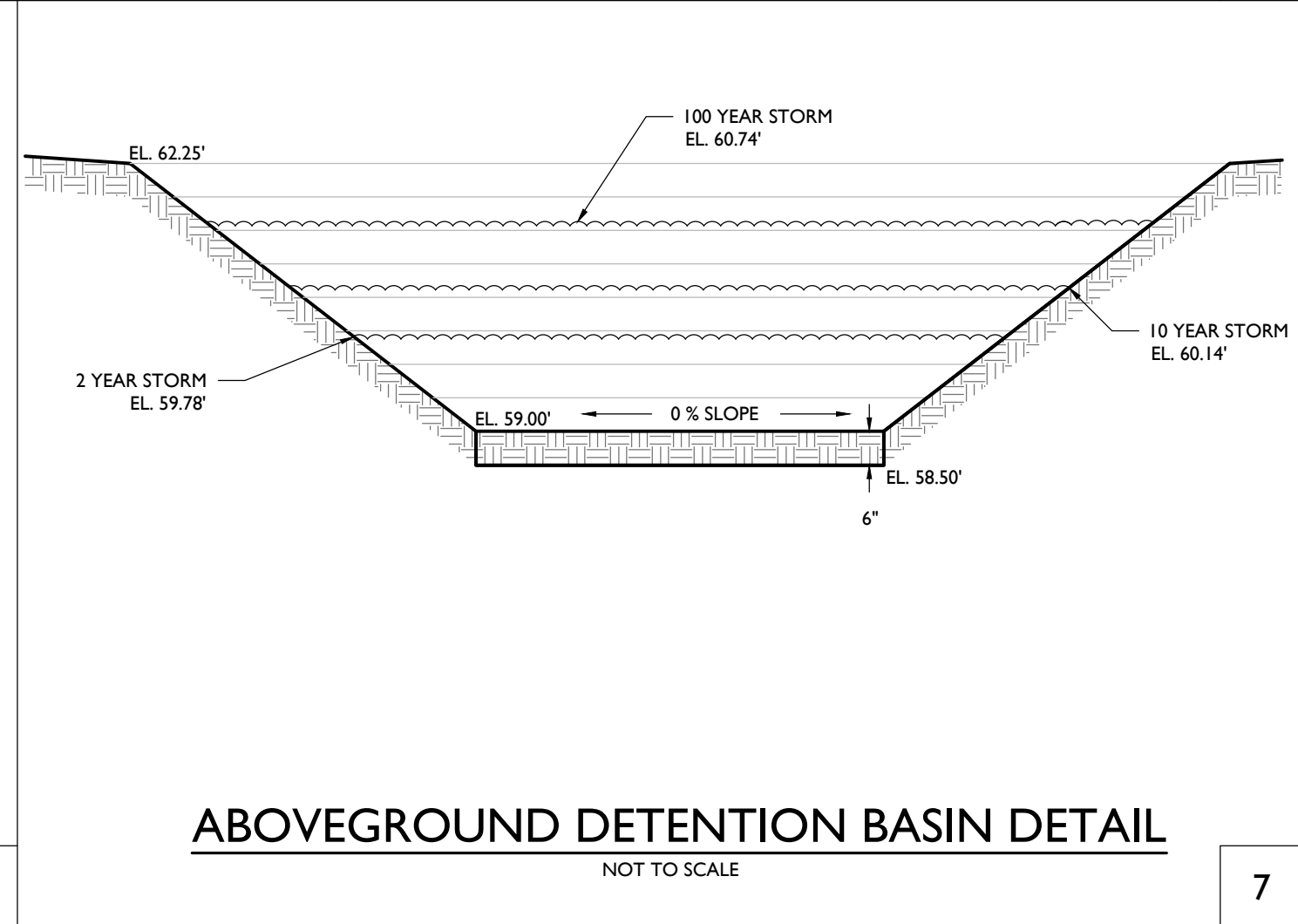
FES #	L (ft)	W ₁ (ft)	W ₂ (ft)	D ₅₀ (in)	Th* (in)
1	3.00	3.00	2.00	6.00	12.00
2	3.00	3.00	2.00	6.00	12.00
3	3.00	3.00	2.00	6.00	12.00

(*) = MINIMUM APRON THICKNESS SHALL BE TWO TIMES THE D₅₀ SIZE FOR THE APRON.

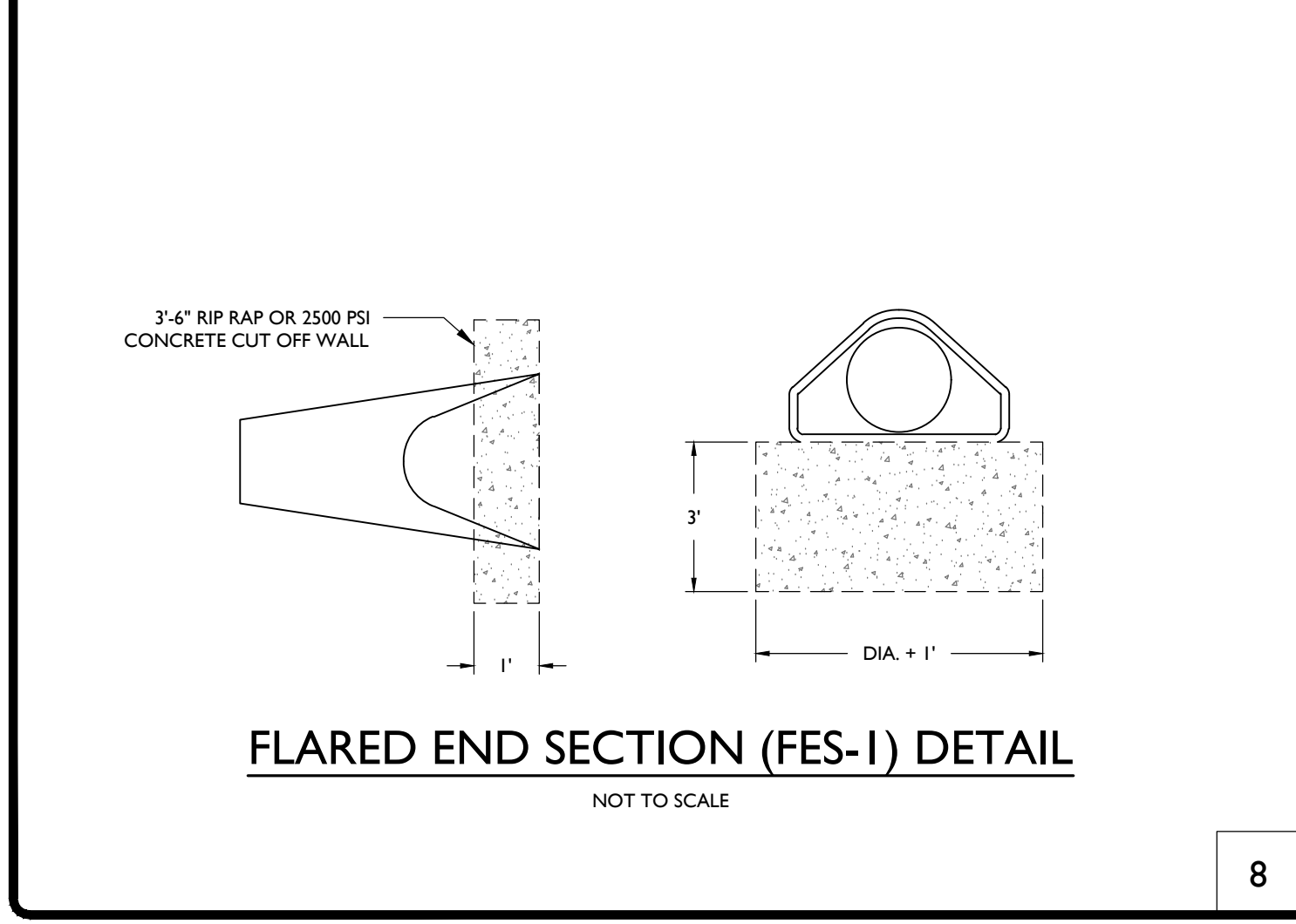
NOTES:

- APRON @ CHANNEL BOTTOM GRADE
- SIDE SLOPE RANGE FROM 1:1 TO 2:1
- RIP-RAP SHALL BE COMPOSED OF A WELL-GRADED MIXTURE OF STONE SIZE SO THAT 50% OF THE PIECES, BY WEIGHT, SHALL BE LARGER THAN THE #50 SIZE.
- BASKET WIRE TO BE GALVANIZED STEEL MESH OPENING SHALL NOT EXCEED 4.5" OR HAVE AN AREA GREATER THAN 10 SQ IN.

RIP-RAP PAD DETAIL
NOT TO SCALE



ABOVEGROUND DETENTION BASIN DETAIL
NOT TO SCALE



FLARED END SECTION (FES-1) DETAIL
NOT TO SCALE

RIP-RAP SIZING CHART

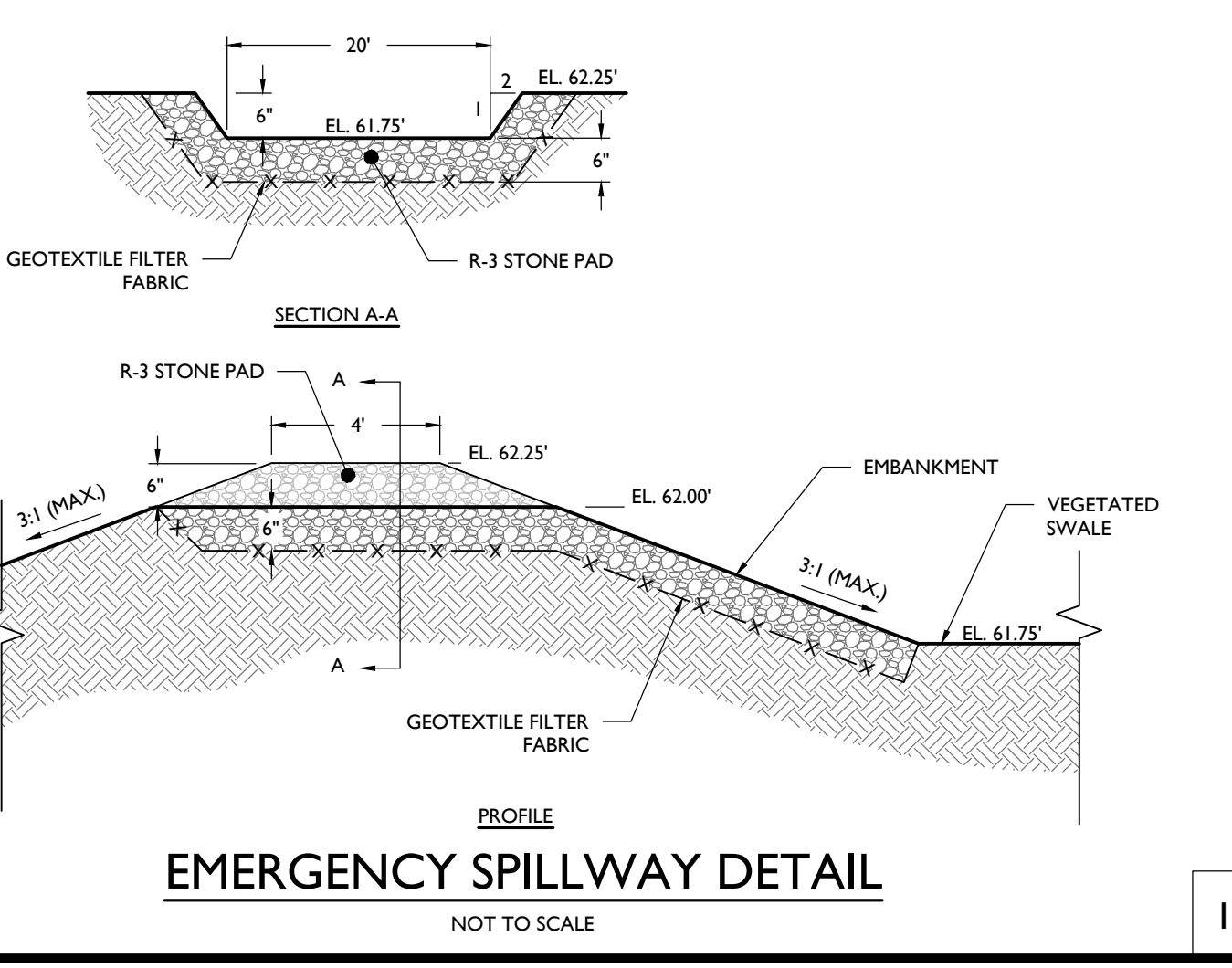
FES #	L (ft)	W ₁ (ft)	W ₂ (ft)	D ₅₀ (in)	Th* (in)
1	6.00	9.50	3.75	6.00	12.00
2	6.00	9.50	3.75	6.00	12.00
3	6.00	9.50	3.75	6.00	12.00

(*) = MINIMUM APRON THICKNESS SHALL BE TWO TIMES THE D₅₀ SIZE FOR THE APRON.

NOTES:

- APRON @ CHANNEL BOTTOM GRADE
- SIDE SLOPE RANGE FROM 1:1 TO 2:1
- RIP-RAP SHALL BE COMPOSED OF A WELL-GRADED MIXTURE OF STONE SIZE SO THAT 50% OF THE PIECES, BY WEIGHT, SHALL BE LARGER THAN THE #50 SIZE.
- BASKET WIRE TO BE PLASTIC-COATED WIRE MESH, OPENING SHALL NOT EXCEED 4.5" OR HAVE AN AREA GREATER THAN 10 SQ IN.

RIP-RAP PAD
NOT TO SCALE



EMERGENCY SPILLWAY DETAIL
NOT TO SCALE

NO.	DATE	ISSUE	BY	DESCRIPTION
02	03/29/2024		JV	MUNICIPAL RESUBMISSION - SIGNAGE
01	03/08/2024		JV	MUNICIPAL SUBMISSION - SITE PLAN REVIEW

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PROPOSED BANK WITH DRIVE-THRU ATM

MAP: 14 LOT: 13
165 NEWBURYPORT TURNPIKE (US ROUTE 1)
TOWN OF ROWLEY
ESSEX COUNTY, MASSACHUSETTS

JOSHUA H. KLINE, P.E.
MASSACHUSETTS LICENSE NO. 53936
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: AS SHOWN PROJECT ID: BOS-230034

TITLE:
CONSTRUCTION DETAILS

DRAWING:
C-13

- NOTES:**
1. ALL DIMENSIONS OF STANDARD GUARDRAIL COMPONENTS, INCLUDING PANELS, POSTS, OFFSET BLOCKS, BOLTS, NUTS, WASHERS AND HOLES, ARE BASED UPON ENGLISH UNIT CONVERSIONS OF THE METRIC MATHEMATICS JOINT COMMITTEE TASK FORCE 13 REPORT: A GUIDE TO STANDARDIZED HIGHWAY SAFETY HARDWARE (RMJ/WWW.AASHTO.ORG/2010/13-REPORT).
 2. ALL GUARDRAIL MATERIALS SHALL CONFORM TO MEET 2 UNLESS OTHERWISE INDICATED.
 3. APPROVAL BY THE ENGINEER IS REQUIRED WHERE A DIFFERING GUARDRAIL CONFIGURATION IS REQUIRED FOR CONSTRUCTABILITY BEYOND THE OPTIONS SHOWN IN THESE STANDARDS ON THE PLANS.
 4. THE BEGIN OR END STATION LABELS SHOWN IN THESE STANDARDS CORRESPOND TO THE STATION AND OFFSET CALCULATIONS SPECIFIED IN THE PLANS.
 5. USE 12" 4" NOMINAL LENGTH PANELS UNLESS OTHERWISE INDICATED IN THESE STANDARDS ON THE PLANS.
 6. ALL LAP SPICES SHALL BE MESH UNLESS OTHERWISE SHOWN.
 7. LAP SPICES SHALL BE CONSTRUCTED WITH THE SPICE RIDE ORIENTED DOWNSTREAM OF THE FINAL DIRECTION OF TRAFFIC IN THE NEAREST TRAVEL LANE. REVERSE LAP SPICES FOR TRAFFIC TRAVEL IN THE OPPOSITE DIRECTION IS NOT REQUIRED.
 8. STANDARD POSTS SHALL BE STEEL OR FIBER GLASS UNLESS OTHERWISE INDICATED IN THE PLANS. FABRICATED TO THE DIMENSIONS SHOWN ON SEE A. POSTS OF A SINGLE MATERIAL TYPE SHALL BE USED THROUGHOUT AN ENTIRE RUN OF GUARDRAIL. EXCEPTIONS ARE ALLOWED ONLY WHEN SPECIFIC MATERIAL TYPES ARE REQUIRED FOR TRANSITION, END TREATMENTS, AND ANCHORAGES.
 9. DEEP POST SHALL ONLY BE USED WHERE INDICATED IN THESE STANDARDS ON THE PLANS.
 10. OFFSET BLOCKS, WHERE PROVIDED, SHALL BE FABRICATED TO THE NORMAL DIMENSIONS SHOWN ON SEE 1.4. PLASTIC OR COMPOSITE OFFSET BLOCKS OF THE SAME NOMINAL DIMENSIONS THAT ARE LISTED ON THE QUALIFIED CONSTRUCTION MATERIALS LIST MAY BE SUBSTITUTED. OFFSET BLOCKS OF A SINGLE MATERIAL TYPE SHALL BE USED THROUGHOUT AN ENTIRE RUN OF GUARDRAIL. EXCEPTIONS ARE ALLOWED ONLY WHEN SPECIFIC MATERIAL TYPES ARE REQUIRED FOR TRANSITION, END TREATMENTS, AND ANCHORAGES.
 11. PAVEMENT MILLING MULDCH, WHERE CALLED FOR IN THE STANDARDS, SHALL CONFORM TO SECTION 730.
 12. GUARDRAIL COLLATORS, CONFORMING TO SECTION 601, SHALL BE INSTALLED AT 20' INTERVALS WITHIN 10' OF AN END TREATMENT OR TRAILING ANCHORAGE AREA AT 100' INTERVALS IN ALL OTHER AREAS UNLESS OTHERWISE SHOWN IN THE PLANS.
 13. MINIMUM OFFSET DISTANCE FROM FACE OF WALKWAY PANEL TO A FIXED (NON-BREAKAWAY) OBJECT SHALL BE 4'-0" FOR T-2 AND 5'-0" FOR T-3.

massDOT CONSTRUCTION STANDARDS SECTION 400 GENERAL NOTES DATE OF ISSUE: OCTOBER 2017 DRAWING NUMBER: 400.1.0

MASSDOT GENERAL CONSTRUCTION NOTES

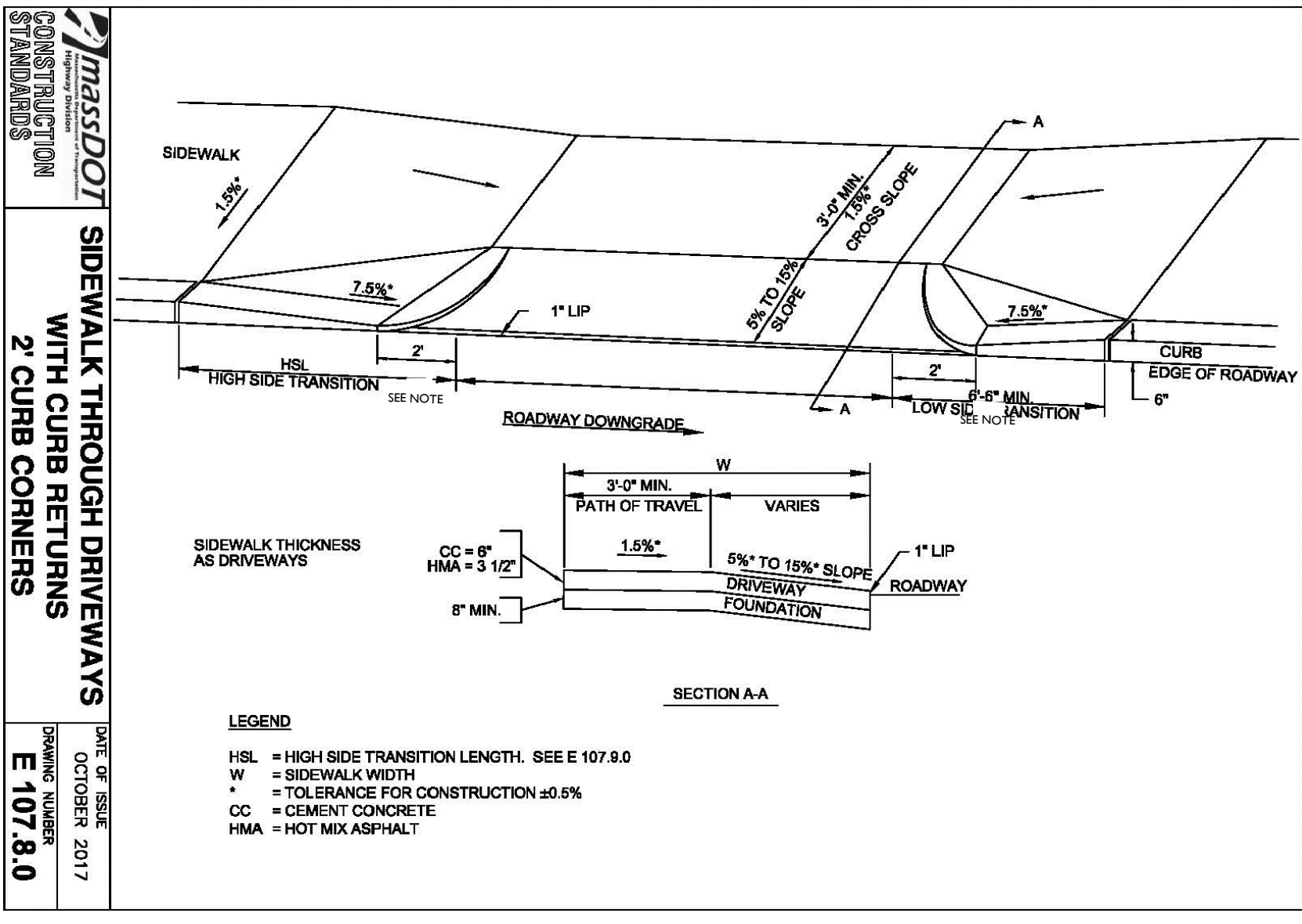
NOT TO SCALE

ROADWAY PROFILE GRADE	* HIGH SIDE TRANSITION LENGTH	ENGLISH UNITS
%		
=0%		6'-6"
>0% TO 1%		7'-8"
>1% TO 2%		9'-0"
>2% TO 3%		11'-0"
>3% TO 4%		14'-0"
>4% TO 5%		15'-0" Max

NOTE:
* BASED ON A DESIGN SLOPE OF 7.5% AND A REVEAL OF 6".

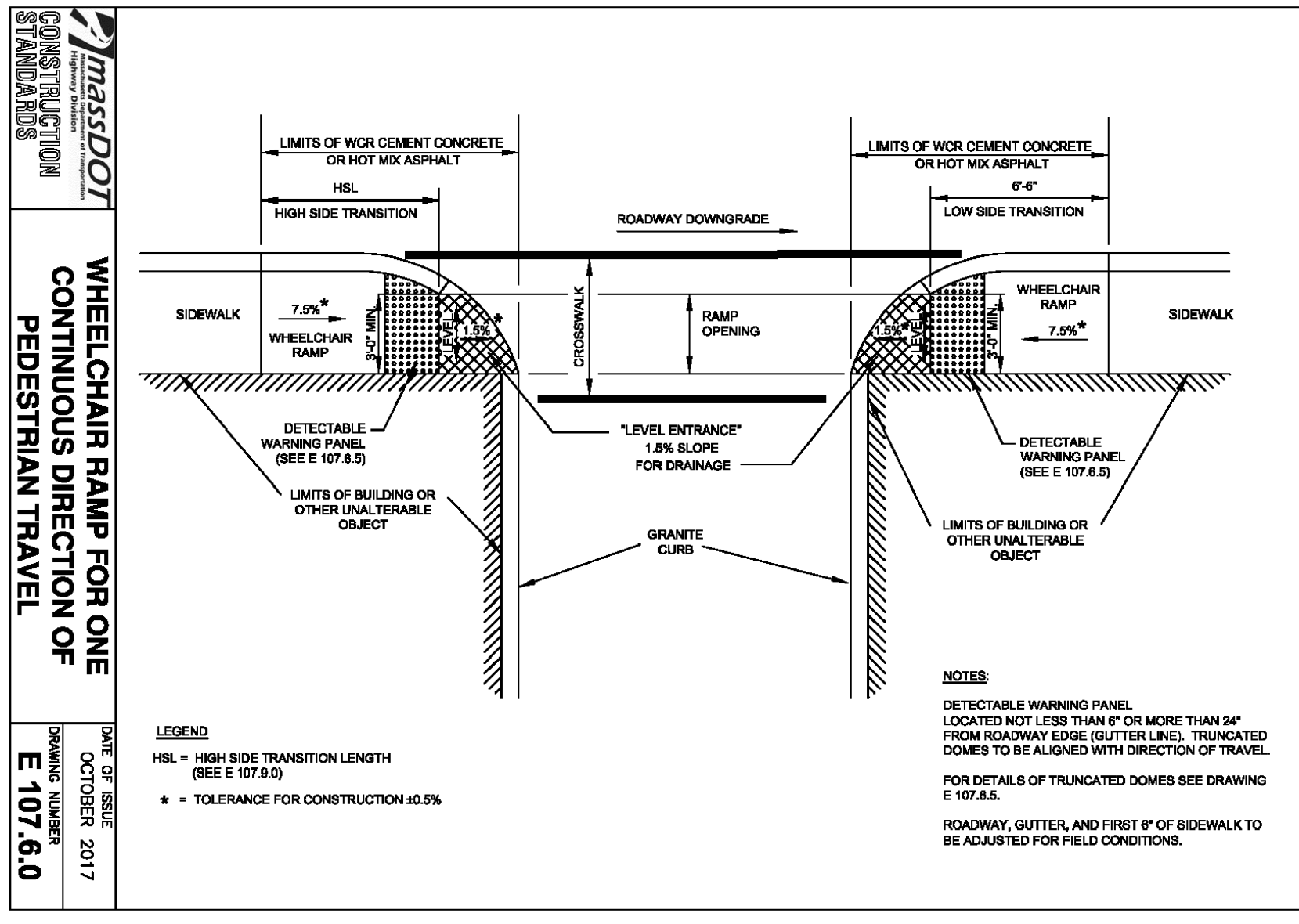
MASSDOT CURB TRANSITION LENGTH TABLE

NOT TO SCALE



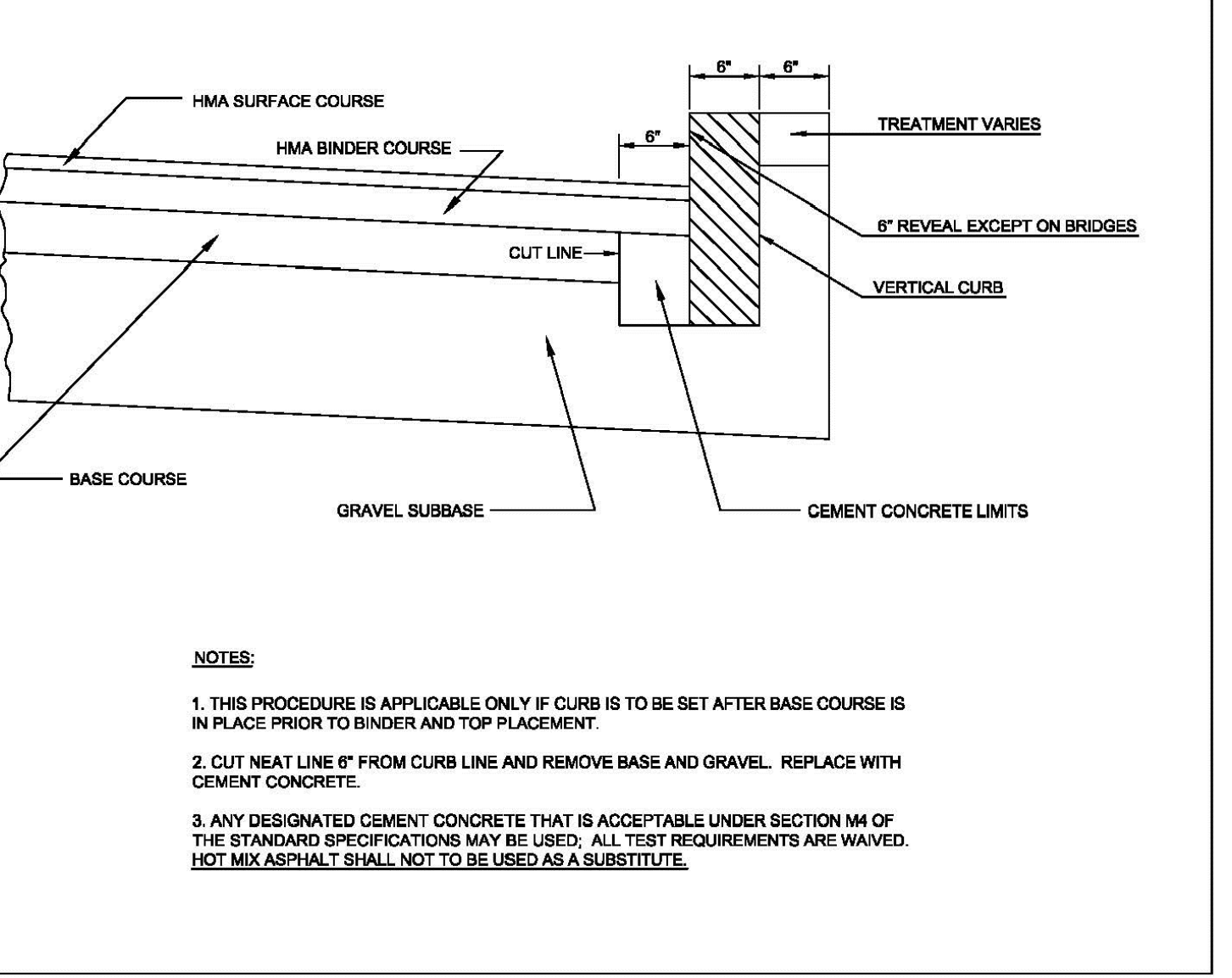
MASSDOT SIDEWALK THROUGH DRIVEWAY DETAIL

NOT TO SCALE



MASSDOT WHEELCHAIR RAMP DETAIL

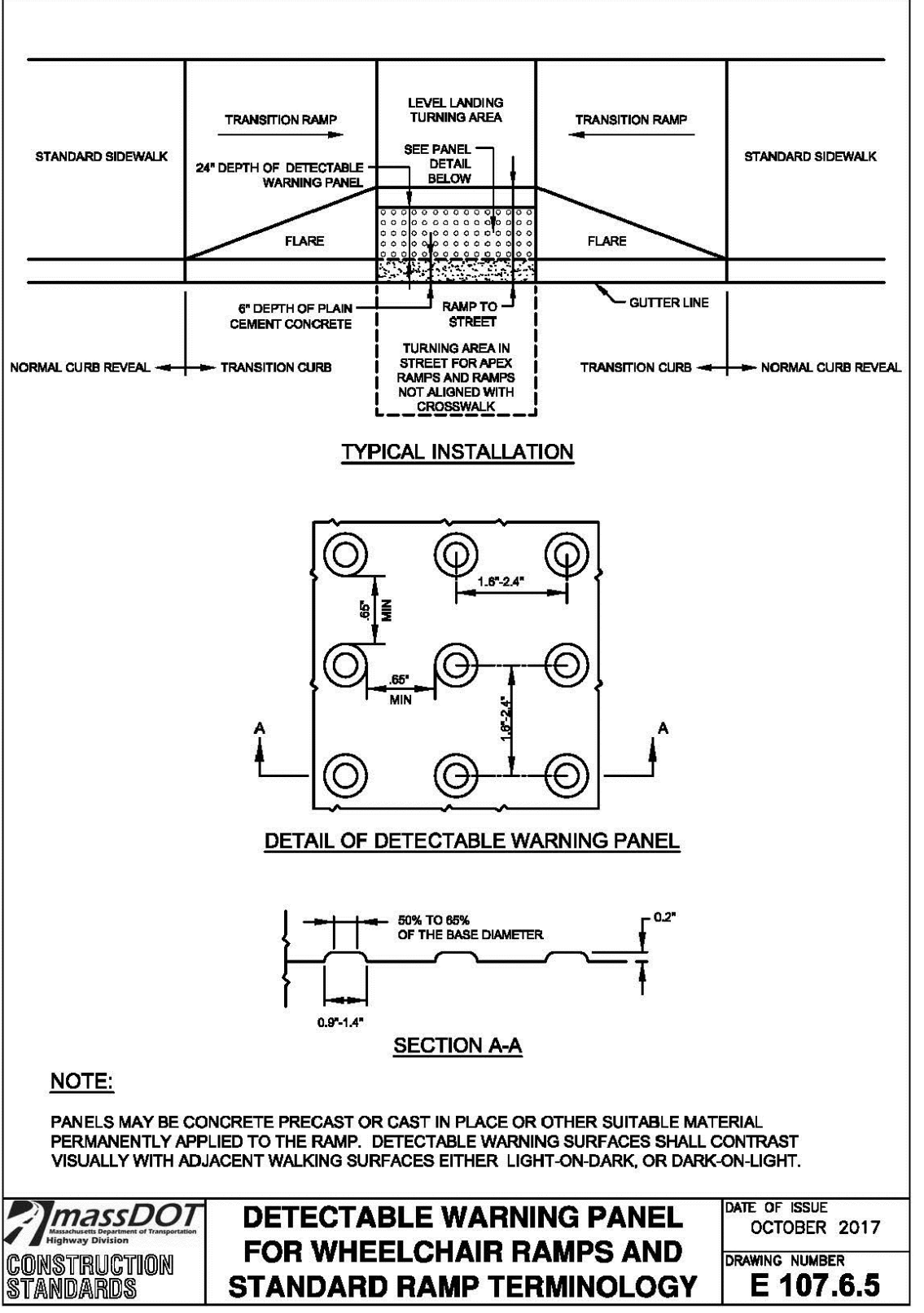
NOT TO SCALE



- NOTES:**
1. THIS PROCEDURE IS APPLICABLE ONLY IF CURB IS TO BE SET AFTER BASE COURSE IS IN PLACE PRIOR TO BINDER AND TOP PLACEMENT.
 2. CUT NEAT LINE 6" FROM CURB LINE AND REMOVE BASE AND GRAVEL. REPLACE WITH CEMENT CONCRETE.
 3. ANY DESIGNATED CEMENT CONCRETE THAT IS ACCEPTABLE UNDER SECTION M4 OF THE STANDARD SPECIFICATIONS MAY BE USED; ALL TEST REQUIREMENTS ARE WAIVED. HOT MIX ASPHALT SHALL NOT BE USED AS A SUBSTITUTE.

MASSDOT GENERAL VERTICAL CURBING DETAIL

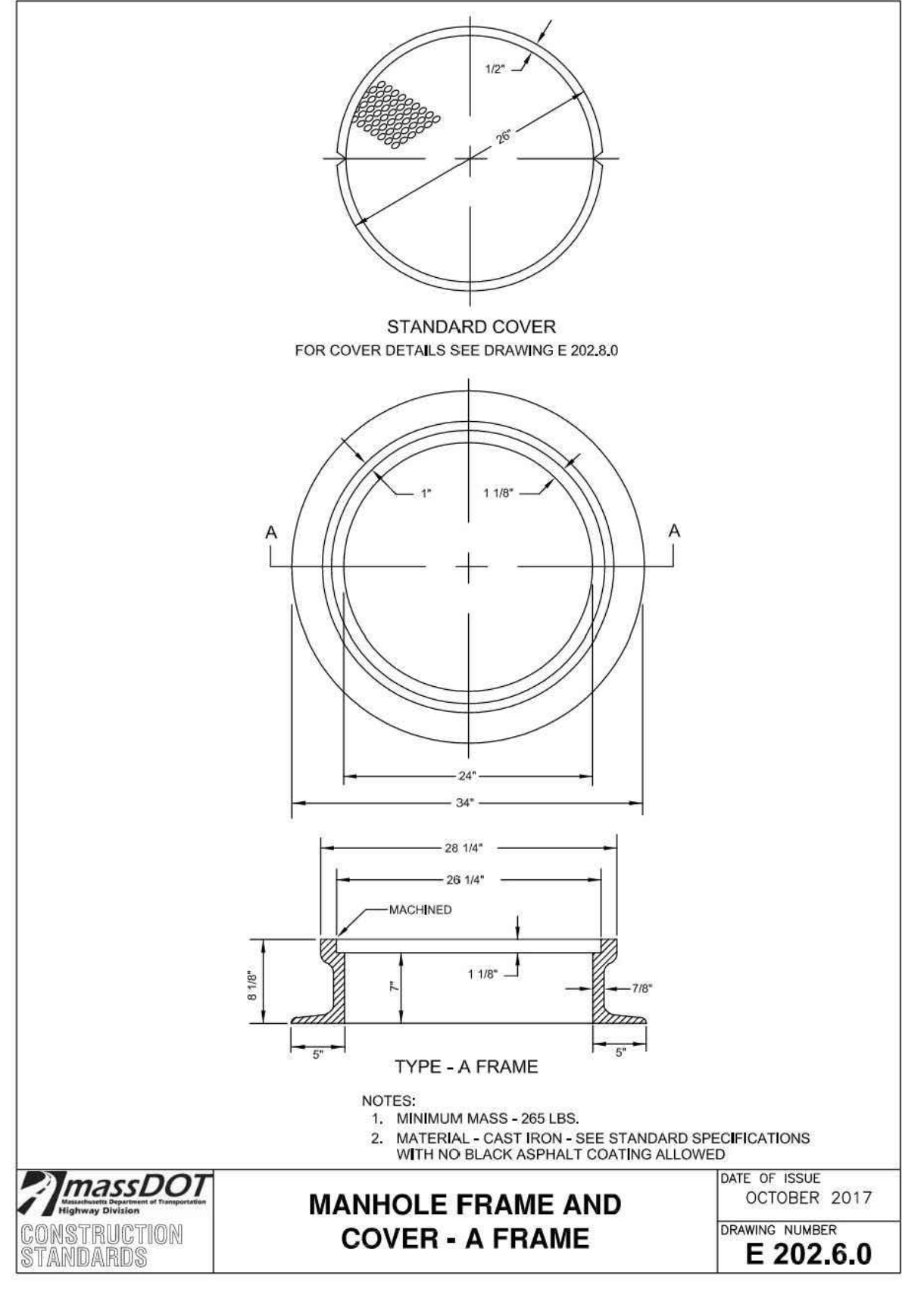
NOT TO SCALE



MASSDOT CONSTRUCTION STANDARDS DETECTABLE WARNING PANEL FOR WHEELCHAIR RAMPS AND STANDARD RAMP TERMINOLOGY DATE OF ISSUE: OCTOBER 2017 DRAWING NUMBER: E 107.6.5

MASSDOT DETECTABLE WARNING STRIP DETAIL

NOT TO SCALE



MASSDOT CONSTRUCTION STANDARDS MANHOLE FRAME AND COVER - A FRAME DATE OF ISSUE: OCTOBER 2017 DRAWING NUMBER: E 202.6.0

MASSDOT FRAME AND COVER DETAIL

NOT TO SCALE

DATE	ISSUE	BY	DESCRIPTION
03/29/2024	01	JV	MUNICIPAL SUBMISSION - SITE PLAN REVIEW
03/29/2024	02	JV	MUNICIPAL SUBMISSION - SIGNAGE

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 120 Washington Street, Suite 201, Salem, MA 01970
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CHASE
 PROPOSED BANK WITH DRIVE-THRU ATM
 MAP: 14 LOT: 13
 165 NEWBURYPORT TURNPIKE (US ROUTE 1)
 TOWN OF ROWLEY
 ESSEX COUNTY, MASSACHUSETTS

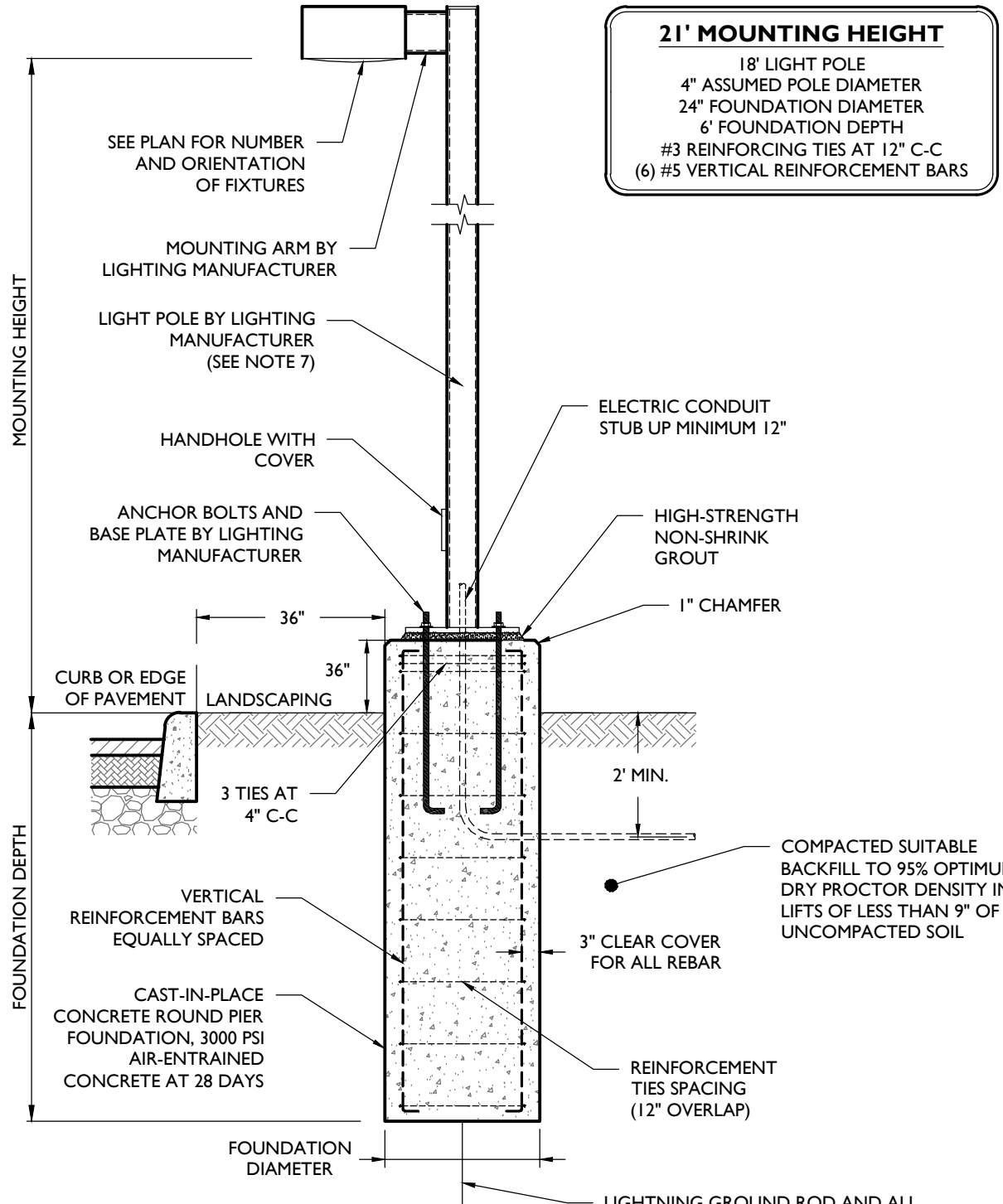
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STONEFIELD engineering & design

SCALE: AS SHOWN PROJECT ID: BOS-230034

TITLE: CONSTRUCTION DETAILS

DRAWING: C-14



LIGHT POLE INSTALLATION DETAIL

- NOTES:
- MINIMUM SOIL BEARING PRESSURE OF 1500 PSF, SOIL FRICTION ANGLE OF 30 DEGREES, AND SOIL DRY UNIT WEIGHT OF 120 PCF SHALL BE CONFIRMED IN THE FIELD BY A QUALIFIED PROFESSIONAL.
 - CAST-IN-PLACE CONCRETE SHALL BE CONSOLIDATED USING VIBRATOR.
 - ALL REBAR TO BE NEW GRADE 60 STEEL.
 - PRE-CAST PIERS ACCEPTABLE UPON WRITTEN APPROVAL OF SHOP DRAWING BY ENGINEER.
 - CONCRETE TO BE INSTALLED A MINIMUM OF 7 DAYS PRIOR TO INSTALLING LIGHT POLE. POURED CONCRETE MIX REQUIRED TO OBTAIN 85% OF DESIGN STRENGTH PRIOR TO INSTALLING LIGHT POLE. CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 4" (WITHIN 1" TOLERANCE).
 - POLE SHALL BE RATED FOR 10 MPH HIGHER THAN MAXIMUM WIND SPEED 33FT ABOVE GROUND FOR THE AREA BASED ON ANSICSAE 7-92.
 - POUR TO BE TERMINATED AT A FORM.
 - WORK SHALL CONFORM TO ACI BEST PRACTICES FOR APPROPRIATE TEMPERATURE AND WEATHER CONDITIONS. CONTRACTOR TO TEMPORARILY SUPPORT ADJACENT SOIL AND STRUCTURES DURING EXCAVATION IF REQUIRED.

ORDER NO.	QTY.	VOLTAGE	OPTIC CODE	DISTRIBUTION	DEL. WATT	CCT	DIMMING ³	CONTROLS	MOUNTING ARM	COLOR	OPTIONS
EACL 01	---	---	---	---	---	---	---	---	---	---	---
FRONT SHIELD	1	120V	Cu-10000lm	AN Asymmetric Nema/Class	80 = 8000K	50 = 5000K	I = Internal Dimming (0-10V) (0-5V) (0-10V) (0-5V) (0-10V) (0-5V)	L = None	CL = 180° (Down) / 180° (Up) / 180° (Left) / 180° (Right) / 180° (Front) / 180° (Back)	BLACK / BLACK / BLACK / BLACK / BLACK / BLACK	M = Motion Sensor (MOTION) / M = Motion Sensor (MOTION) / M = Motion Sensor (MOTION) / M = Motion Sensor (MOTION) / M = Motion Sensor (MOTION) / M = Motion Sensor (MOTION)

Current LUMENS

AREA LIGHT FIXTURE 'A' & 'B' & 'C' SPECIFICATION

NOT TO SCALE

Description
The patented Lumark Crosstour™ MAXX LED wall pack series of luminaires provides low-profile architectural style with super bright, energy-efficient LEDs. The rugged die-cast aluminum construction, back box with secure lock hinges, stainless steel hardware along with a sealed and gasketed optical compartment make Crosstour impervious to contaminants. The Crosstour MAXX wall luminaire is ideal for wall surface, inverted mount for decorative/landscape lighting, perimeter and site lighting. Typical applications include pedestrian walkways, building entrances, multi-use facilities, industrial facilities, perimeter parking areas, storage facilities, institutions, schools and loading docks.

Specifications Features
Construction
Low-profile LED design with rugged one-piece, die-cast aluminum back box and hinged removable door. Machine-style housing styles incorporate both a full cutoff and reflective lens design. Full cutoff and reflective lens models are available in 80W, 81W and 82W. Patent pending secure lock hinge feature allows for safe and easy tool-free electrical connections with the supplied push-connectors. Back box includes four 1/2" NPT threaded conduit entry points. The back box is secured by four lag bolts (supplied by others). External design extends 8" from the fixture surface. One-piece silicone gasket seals door and back box. Not recommended for car wash applications.

Optical
Silicone sealed optical LED chamber incorporates a custom engineered reflector providing high-efficiency illumination. Full cutoff models integrate an impact-resistant modified refractive prism optical lens assembly meeting requirements for Dark Sky compliance. Reflective lens models incorporate a modified lens assembly designed for maximum throw. Solid state LED Crosstour MAXX luminaires are thermally optimized with eight lumen packages in cool 5000K, neutral 4000K, or warm 3000K LED color temperatures (CCT).

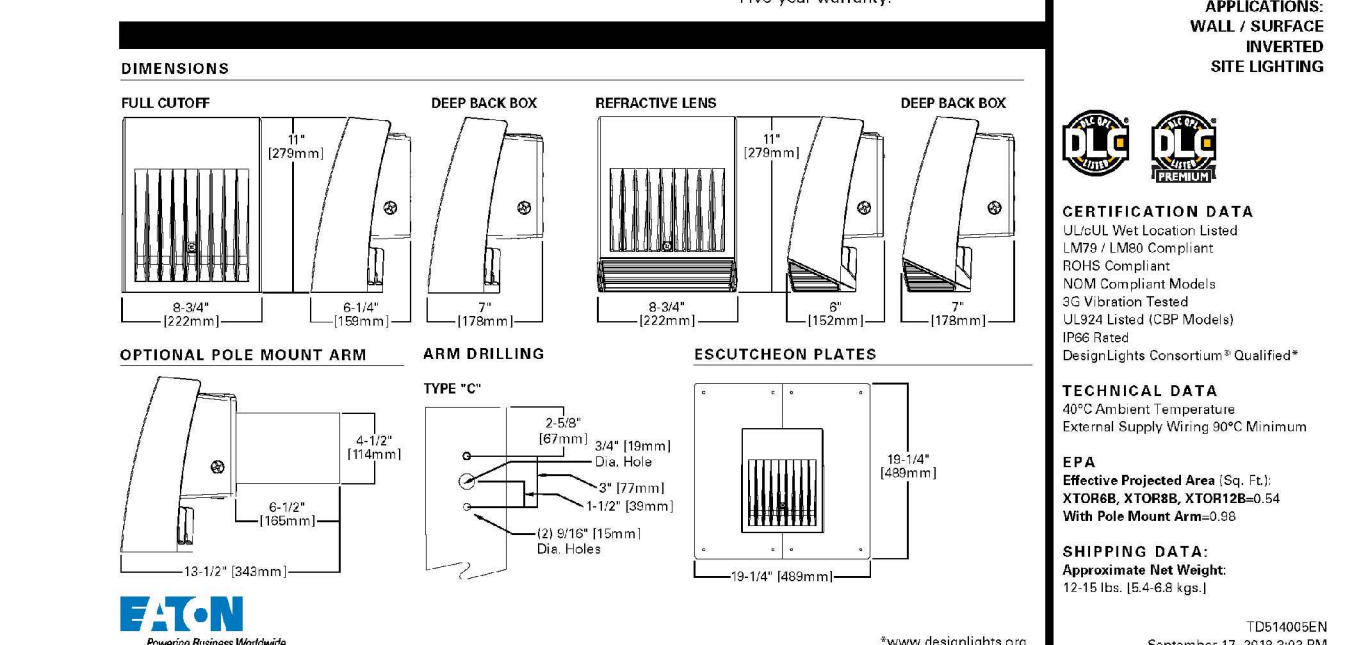
Electrical
LED driver is mounted to the die-cast aluminum housing for optimal heat sinking. LED thermal management system incorporates both conduction and natural convection to transfer heat rapidly away from the LED source. 50W, 81W and 100W models operate in -40°C to 40°C (-40°F to 104°F). High ambient 50°C (122°F) models available in 80W and 81W models only. Crosstour MAXX luminaires maintain greater than 80% of initial light output after 70,000 hours of operation. Four half-inch NPT threaded conduit entry points allow for thru-branch wiring. Back box is an authorized electrical wiring compartment. Integral LED electronic driver incorporates surge protection. 100-277V 50/60Hz, 480V 60Hz, or 247V 60Hz electrical operation. 480V is compatible for use with 480V Wye systems only.

Emergency Egress
Optional integral cold weather battery emergency egress includes emergency operation test switch (available in 80W and 81W models only), an AC-ON indicator light and a premium vented sealed, maintenance-free nickel-metal hydride battery pack. The separate emergency lighting LEDs are wired to provide redundant emergency lighting. Listed to UL Standard 924, Emergency Lighting.

Area and Site Pole Mounting
Optional aluminum 8-1/2" arm features internal bolt guides for supplied twin support rods, allowing for easy positioning of the fixture during installation to pole. Supplied with round plate adapter plate. Optional toron adapter fits 2.50" or 3.12" O.D. Toron.

Finish
Crosstour MAXX is protected with a super TiO2 carbon bronze or silver white polyester powder coat paint. Super TiO2 powder coat paint finishes withstand extreme climate conditions while providing optimal color and gloss retention of the installed life.

Warranty
Five-year warranty.



AREA LIGHT FIXTURE 'E' SPECIFICATIONS



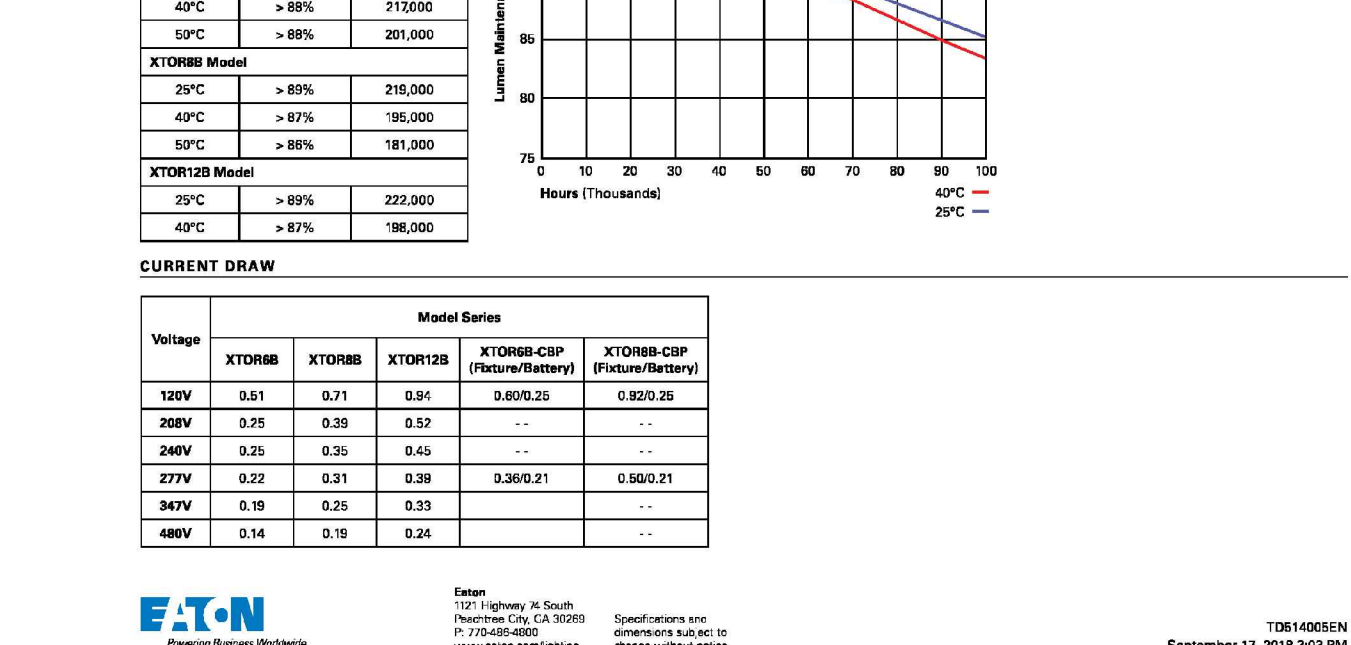
Current LUMENS

AREA LIGHT FIXTURE 'A' & 'B' & 'C' SHIELDING SPECIFICATION

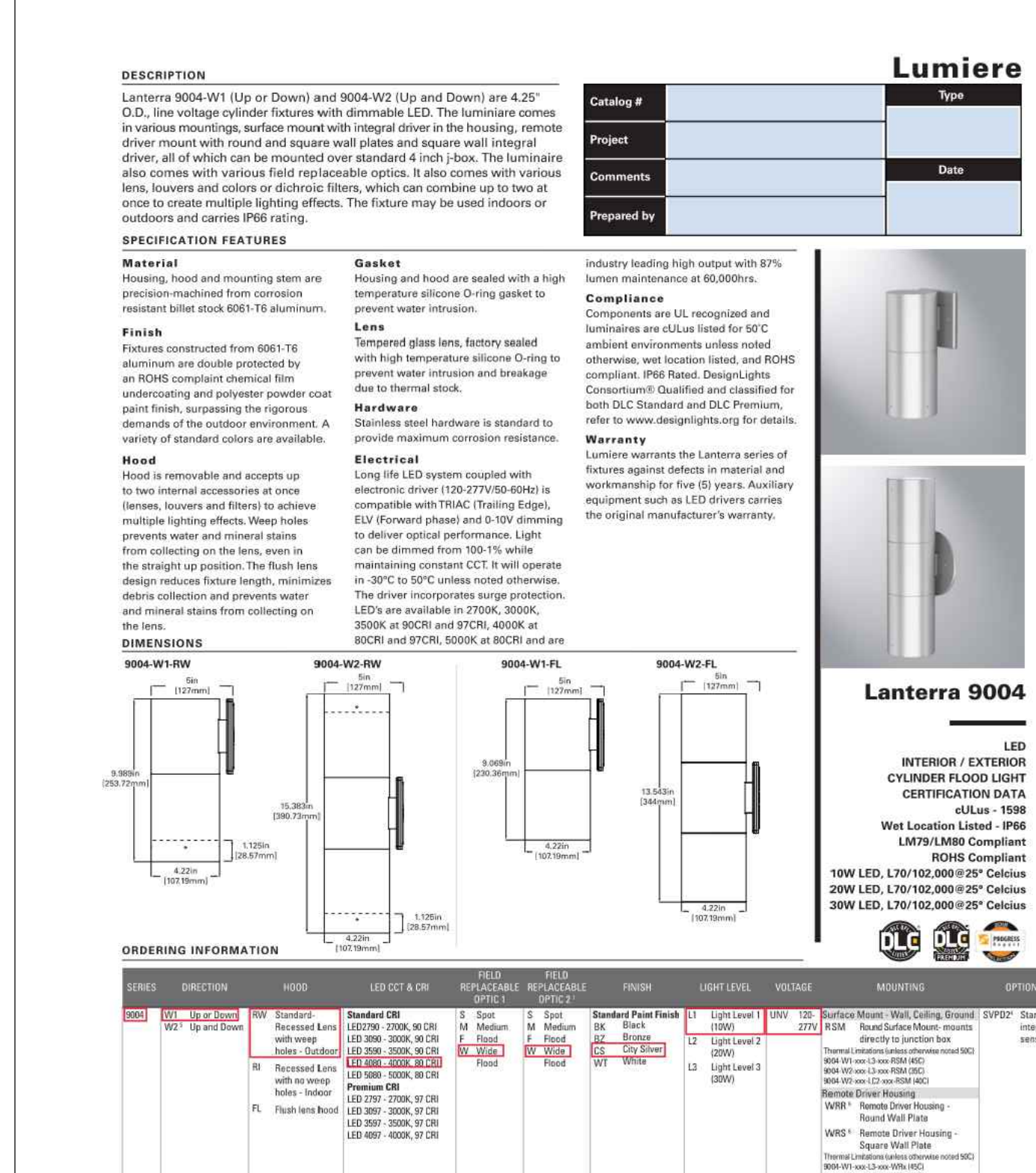
NOT TO SCALE

POWER AND LUMENS BY FIXTURE MODEL

LED Information	XTOR8B	XTOR8BL	XTOR8W	XTOR8BLW	XTOR8B-W	XTOR8B-LW
Delivered Lumens	6,179	8,373	8,373	6,173	8,811	5,228
B.U.G. Rating	81-08-01	82-04-03	81-04-01	82-04-03	81-04-01	82-04-03
CCT (Kelvin)	3000K	3000K	4000K	4000K	3000K	3000K
CR (Color Rendering Index)	70	70	70	70	70	70
Power Consumption (Watts)	59W	59W	59W	59W	59W	59W



AREA LIGHT FIXTURE 'F' SPECIFICATIONS



Current LUMENS

AREA LIGHT FIXTURE 'D' SPECIFICATIONS



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JOSHUA H. KLINE, P.E.
MASSACHUSETTS LICENSE NO. 53936
LICENSED PROFESSIONAL ENGINEER

SCALE: AS SHOWN PROJECT ID: BOS-230034
TITLE: CONSTRUCTION DETAILS
DRAWING: C-15