MAP 783Z LOT 16

MANCHESTER STREET CONCORD AUTO LLC & d/b/a CAPITAL CITY SUBARU

MANCHESTER STREET CONCORD AUTO TIC, LLC

300 TRADE CTR - STE 7700

WOBURN, MA 01801-7419

WCK CONCORD-SB, LLC
d/b/a CAPITAL CITY SUBARU
150 MANCHESTER STREET
CONCORD, NH 03301

ENGINEER/AGENT

NORTHPOINT ENGINEERING, LLC 119 STORRS ST., STE 201 CONCORD, NH 03301 SURVEYOR

**APPLICANT** 

RICHARD D. BARTLETT & ASSOCIATES, LLC 214 NORTH STATE STREET CONCORD, NH 03301

**ABUTTERS** 

MAP 782Z LOT 30
ALOSA PASCAL F REVOCABLE TRUST
ALOSA SALVATORE M SR TRUSTEE
PO BOX 1182
CONCORD, NH 03302-1182

MAP 783Z LOT 17 BRIAN DUVAL REALTY LLC 146 MANCHESTER STREET CONCORD, NH 03301-5112

MAP 783Z LOT 15 PRM AUTO/CONCORD II LLC 300 TRADE CENTER, STE 7700 WOBURN, MA 01801-7419 MAP 783Z LOT 13 METZGER/MCGUIRE, INC. PO BOX 2217 CONCORD, NH 03302-2217

MAP 783Z LOT 11 MARK P LEFEBVRE REVOCABLE TRUST OF 1997 7119 HACIENDA DR GRANT, FL 32949-3417

MAP 783Z LOT 8 LIFE STORAGE LP 6467 MAIN ST, STE 200 WILLIAMSVILLE, NY 14221-5856

**LEGEND** 

<b>EXISTING</b>	<b>DESCRIPTION</b>	<b>PROPOSED</b>
•	STONE BOUND	•
0	IRON PIPE/PIN	•
<b>©</b>	DRILL HOLE	•
T <u>B</u> M ❤	BENCHMARK	T <u>B</u> M
	CATCH BASIN	
	DRAIN MANHOLE	
<u>S</u>	SEWER MANHOLE	
O co	CLEANOUT	O co
○ MW	MONITORING WELL	O MW
$\bowtie$	UTILITY VALVE	H
4°00	WATER SHUT-OFF VALVE	$ \mu_{\mathcal{S}}^{O} \circ $
8	FIRE HYDRANT	~
<del></del>	SIGN	
•	BOLLARD	•
<b>D</b>	UTILITY POLE	<b>D</b>
-•	GUY WIRE	-•
	TREE	
	SHRUB	$\circ$
	SPOT GRADE	F100.00
	WETLAND LIMITS	
_ · _ · _	EDGE OF WATER	
	BOUNDARY	
	ABUTTER LINE	
	EASEMENT	
	EDGE OF PAVEMENT	
248 - <b>-</b>	CONTOUR (2-FT)	—— F248 ——
250 - <del></del>	CONTOUR (10-FT)	—— F250 ——
w	WATER LINE	—— w——
s	SEWER LINE	——s—
—— SFM ———	SEWER FORCE MAIN	SFM
G	GAS LINE	—— G ——
D	DRAINAGE LINE (<12")	—— D ——
	DRAINAGE LINE (>12")	
—— UD ———	UNDERDRAIN	—— UD ——
—— UGU ———	UNDERGROUND UTIL.	——— UGU ———
—— OHU ———	OVERHEAD UTIL.	—— они ——
o	FENCE	o
	SILT FENCE	<del>x</del>

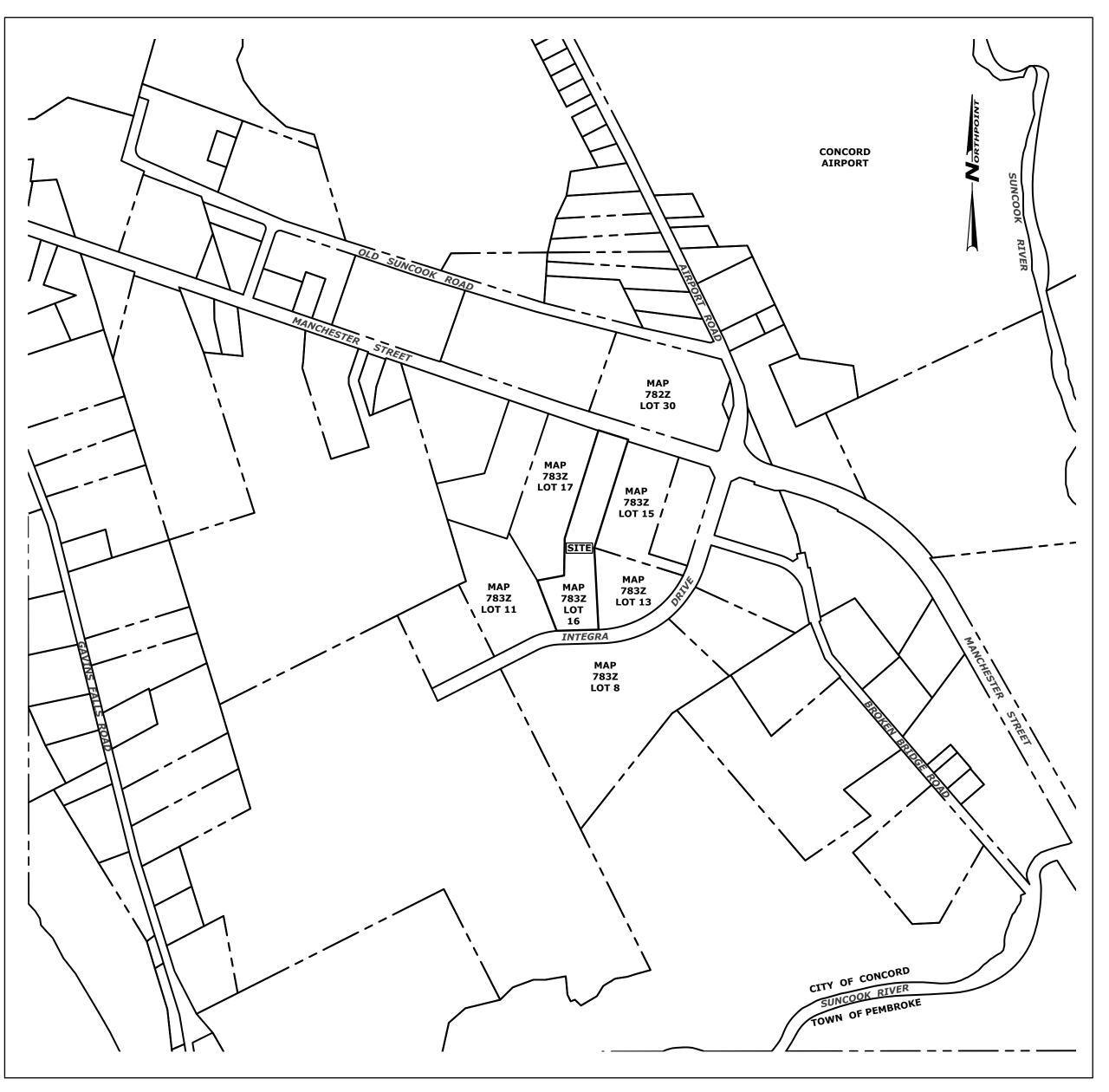
 $\bigcirc$ 

# SITE IMPROVEMENT PLANS

PREPARED FOR:

# CAPITAL CITY SUBARU

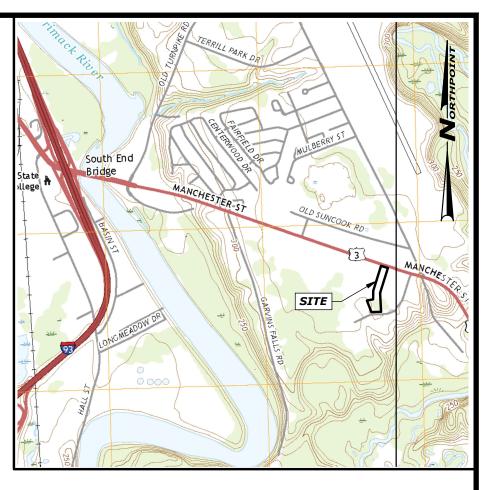
150 MANCHESTER STREET (ML 783Z-16)
CONCORD, NH



LOCATION PLAN

SCALE: 1"=400'±

PERMITTING PLANS
NOT FOR CONSTRUCTION
FEBRUARY 19, 2025



**VICINITY MAP** 

SCALE: 1"=2,000'±

### SHEET INDEX

NO.	TITLE	LAST REVISED
	COVER SHEET	
1-2	EXISTING CONDITIONS PLANS	
3	REMOVAL PLAN	
4-6	SITE PLANS	
<i>7-8</i>	GRADING & DRAINAGE PLANS	
9	UTILITIES PLAN	
10	LIGHTING PLAN	
11	LANDSCAPE PLAN	
12	EROSION CONTROL PLAN	
13-19	CONSTRUCTION DETAILS	

## **APPROVED**

UNDER THE PROVISIONS OF R.S.A. 674:35 & R.S.A. 674:36

CITY PLANNING BOARD

CITY OF CONCORD, NEW HAMPSHIRE

In accordance with vote of the board dated:

Approval of this plat is limited to lots as shown.

Clerk Chair

# **COVER SHEET**

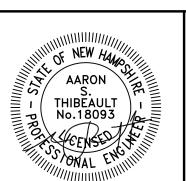
PREPARED FOR:

# CAPITAL CITY SUBARU

150 MANCHESTER STREET (ML 783Z-16)
CONCORD, NH

APPLICANT WCK CONCORD-SB, LLC
d/b/a CAPITAL CITY SUBARU
150 MANCHESTER STREET
CONCORD, NH 03301

OWNER MANCHESTER STREET CONCORD AUTO, LLC & MANCHESTER STREET CONCORD AUTO TIC, LLC 300 TRADE CTR. - SUITE 7700 WORBURN, MA 01801-7419



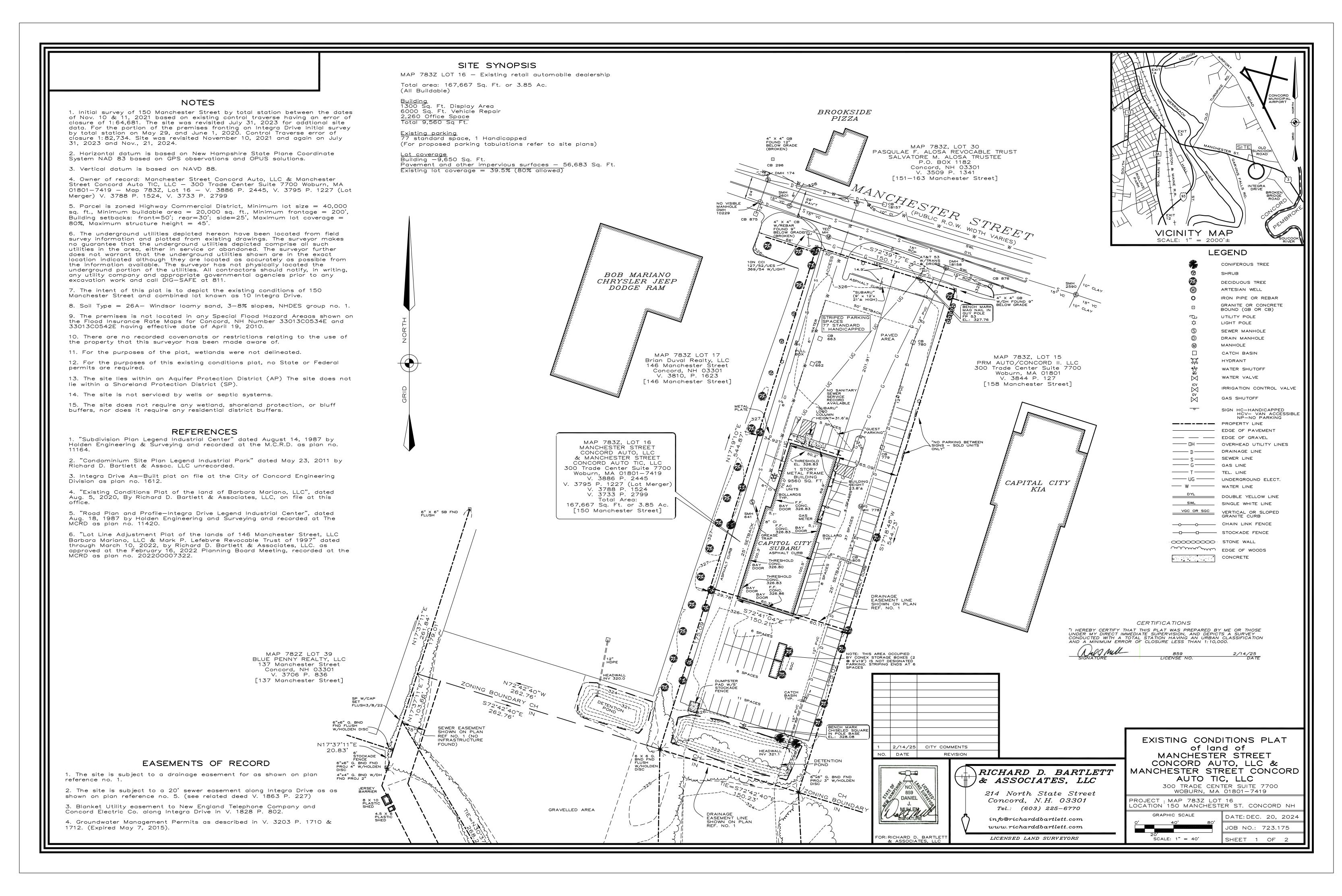
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<u>10.</u>	<u>DATE</u>	<u>DESCRIPTION</u>
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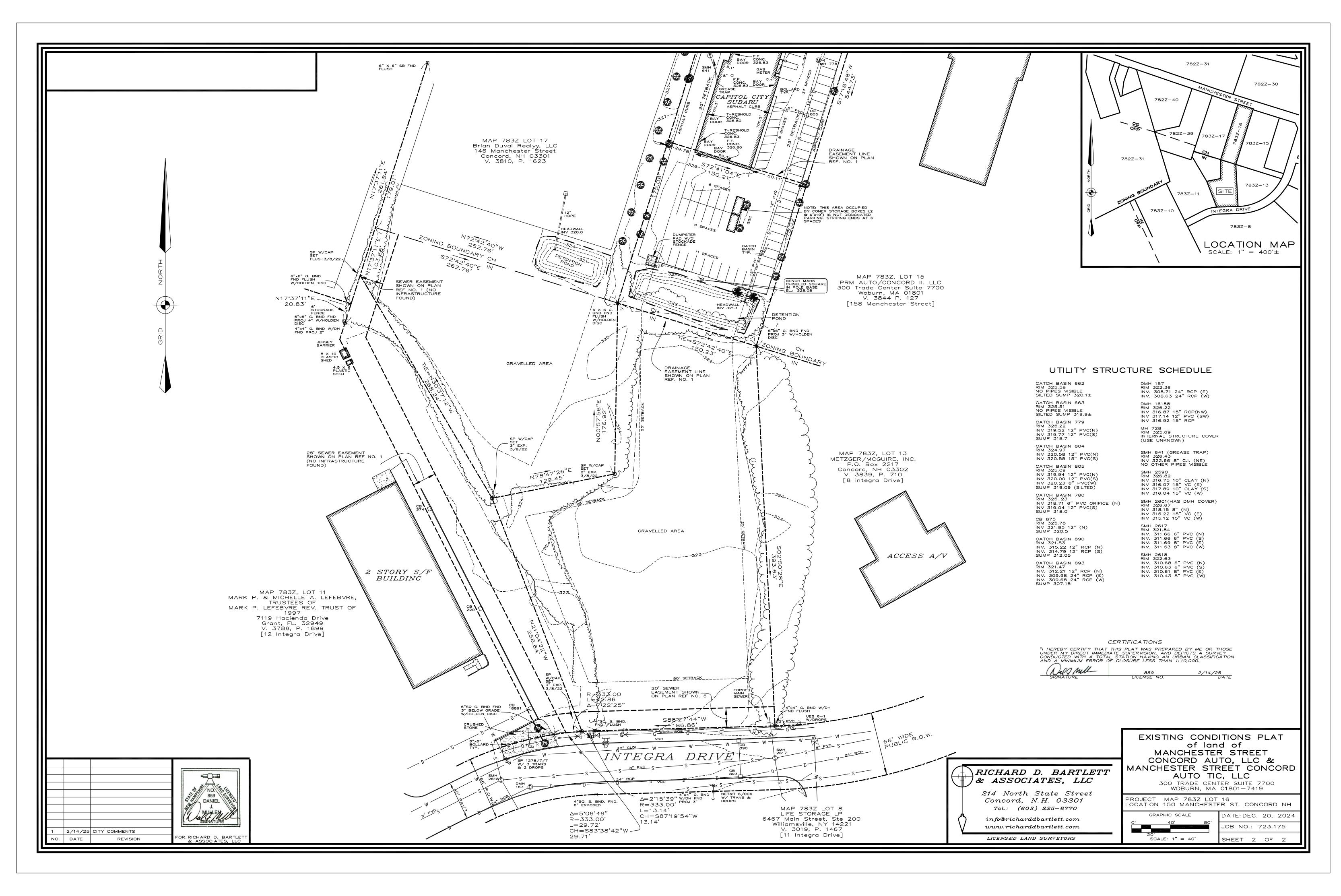


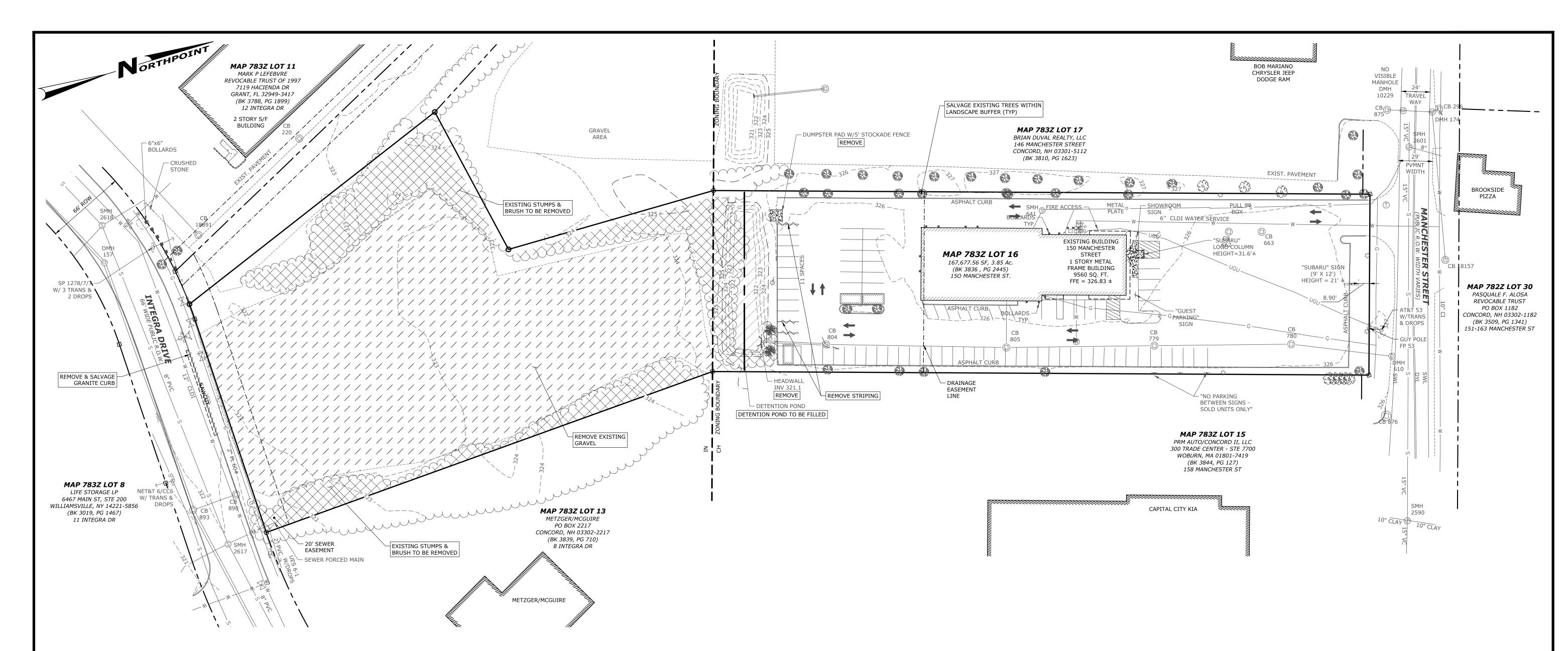
119 Storrs St, Ste 201 Concord, NH 03301 Tel 603-226-1166 Fax 603-226-1160

DATE: FEB. 2025
PROJ.: 23012
SCALE: AS SHOWN
SHEET: ----

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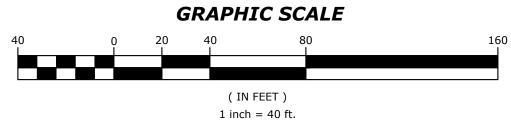




#### **DEMOLITION NOTES:**

- 1. THE SUBJECT PARCEL IS LOT 17 ON THE CITY OF CONCORD TAX MAP 783Z. THE OWNER OF RECORD IS MANCHESTER STREET CONCORD AUTO, LLC & MANCHESTER STREET CONCORD AUTO TIC, LLC OF 300 TRADE CENTER - SUITE 7700, WOBURN, MA
- 2. REFERENCE THE SUBJECT PARCEL OF LAND AS EXISTING LOT OF RECORD KNOWN AS CITY OF CONCORD TAX MAP/LOT (ML) 783Z-16 LOCATED AT 150 MANCHESTER STREET.
- 3. PRIOR TO CONSTRUCTION CONTACT DIG SAFE, TOLL FREE AT 811. NEW HAMPSHIRE LAW REQUIRES NOTIFICATION AT LEAST THREE BUSINESS DAYS BEFORE DIGGING OPERATIONS START. IN AN EMERGENCY, CALL IMMEDIATELY.
- 4. REFER TO THE EXISTING CONDITIONS PLAN FOR PLAN REFERENCES, ADDITIONAL NOTES, EXISTING DRAINAGE, AND SANITARY SEWER INFORMATION.
- 5. EXISTING CONDITIONS SHOWN HEREON ARE THE PRODUCT OF A FIELD SURVEY CONDUCTED BY RICHARD D. BARTLETT & ASSOCIATES, LLC IN AUGUST 2023 AND NOVEMBER 2024.
- 6. THE UTILITY INFORMATION SHOWN IS BASED ON THE ABOVE GROUND LOCATION OF VISIBLE UTILITIES AND APPROXIMATION BASED ON RECORD PLANS. CONTRACTOR TO FIELD VERIFY ALL UTILITIES OF RECORD PRIOR TO ANY CONSTRUCTION.
- 7. ABATEMENT OF HAZARDOUS MATERIALS SUCH AS LEAD PAINT, ASBESTOS, ETC. SHALL BE PERFORMED BY A LICENSED CONTRACTOR PRIOR TO THE COMMENCEMENT OF DEMOLITION. A PRE-DEMOLITION SURVEY SHALL BE PERFORMED BY A LICENSED CONTRACTOR PRIOR TO THE START OF DEMOLITION ACTIVITIES TO ENSURE PROPER DEMOLITION DISPOSAL
- 8. DEMOLITION SEQUENCING WILL BE DIRECTED BY THE GENERAL CONTRACTOR, THE ARCHITECT, AND THE OWNER TO ENSURE MINIMAL DISRUPTION TO THE ACTIVE BUSINESS.
- 9. ALL WORK PERFORMED SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE CITY OF CONCORDS CONSTRUCTION STANDARDS.
- 10. CONTRACTOR SHALL NOTIFY OWNER, ENGINEER, AND ARCHITECT IMMEDIATELY IF SITE CONDITIONS DIFFER FROM WHAT IS
- 11. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES WITHIN THE LIMIT OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR DAMAGES TO ANY EXISTING UTILITIES AND ALL COSTS ASSOCIATED WITH THE REPLACEMENT OR REPAIR.
- 12. THE REMOVAL OF EXISTING DETENTION POND AND ASSOCIATED PIPING SHALL BE CONDUCTED IN DRY CONDITIONS TO THE EXTENT POSSIBLE. INSTALLATION OF NEW STRUCTURES AND PIPES WILL BE CONDUCTED PRIOR TO THE DEMOLITION TO THE
- 13. ALL EROSION CONTROL BEST MANAGEMENT PRACTICES OUTLINED BY THE PLANS MUST BE IMPLEMENTED IN ADVANCE OF AND DURING LAND DISTURBANCE ACTIVITIES ON SITE.
- 14. ALL STUMPS, BRUSH, AND TREES SHALL BE DISPOSED OF IN A LEGAL MANNER.
- 15. ALL DEMOLITION MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.





# REMOVAL PLAN

PREPARED FOR:

# CAPITAL CITY SUBARU

150 MANCHESTER STREET (ML 783Z-16) CONCORD, NH

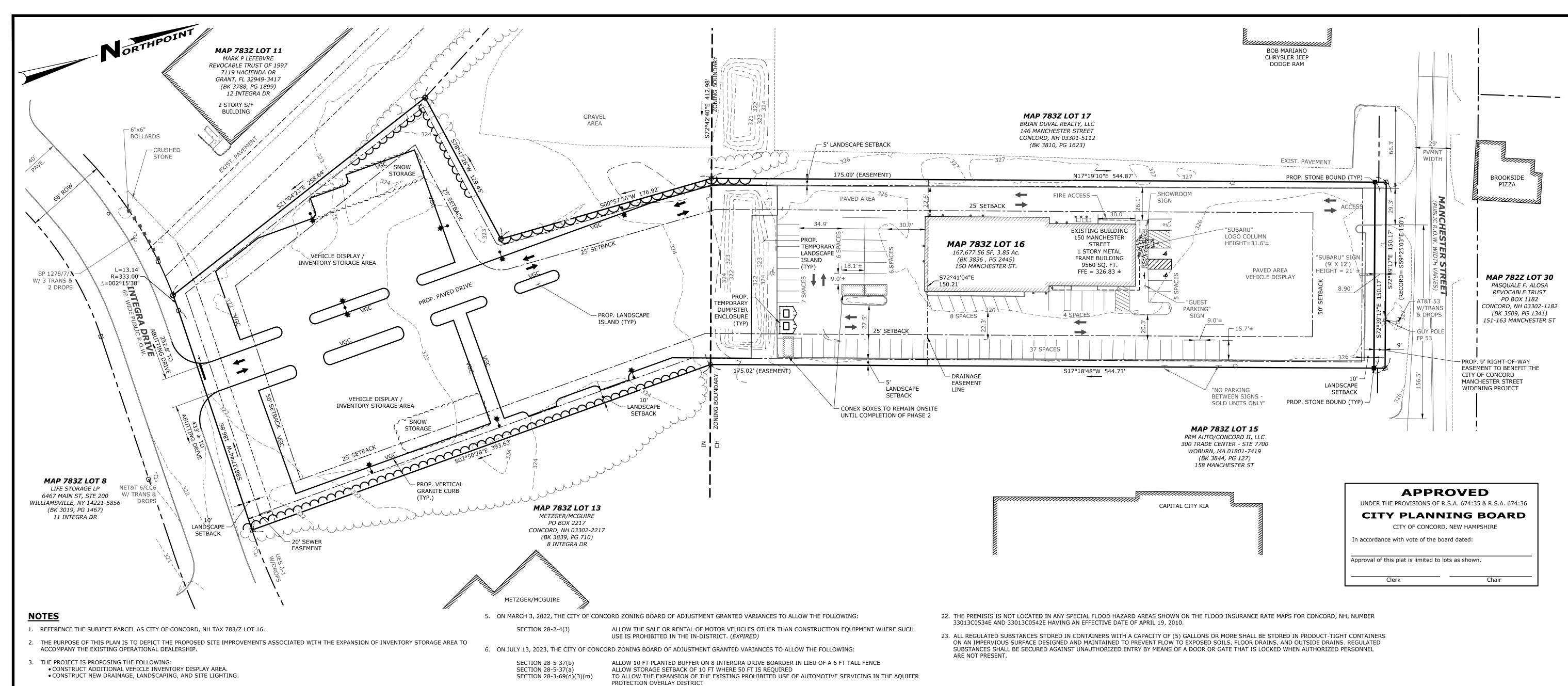
150 MANCHEST CONCORD, NH (	ER STREET		300 TRADE CTR SUITE 7700 WORBURN, MA 01801-7419
AARON S. THIBEAULT No. 18093 PER SONAL ENGINEERING	REVISIONS:  NO. DATE	DESCRIPTION	
			I

Civil Engineering Land Planning Construction Services www.northpointeng.com

APPLICANT: WCK CONCORD-SB, LLC

OWNER: MANCHESTER STREET CONCORD AUTO, LLC &

DATE: FEB. 2025 PROJ.: 23012 SCALE: 1"=40' SHEET: 3 OF 19



- 4. EXISTING CONDITIONS SHOWN HEREON ARE A PRODUCT OF FIELD SURVEY PERFORMED BY RICHARD D. BARTLETT & ASSOCIATES, LLC. REFER TO PLAN TITLED "EXISTING CONDITIONS PLAT OF LAND OF MANCHESTER STREET CONCORD AUTO, LLC & MANCHESTER STREET CONCORD AUTO TIC, LLC" DATED DECEMBER 20, 2024 FOR REFERENCE TO ALL KNOWN PRIOR SUBDIVISIONS & SURVEYS, EXISTING COVENANTS & RESTRICTIONS, AND ANY PUBLIC OR PRIVATE EASEMENTS ENCUMBERING THE SUBJECT PARCEL.
- 5. THE SUBJECT PARCEL CONTAINS 167,677.56 SF OR 3.85 ACRES, PRIOR TO THE MANCHESTER STREET RIGHT-OF-WAY WIDENING PROJECT. THE PROPOSED PARCEL FOLLOWING THE ANTICIPATED RIGHT-OF-WAY EASEMENT IS 166,322.32 SF OR 3.82 ACRES. ALL AREA CALCULATIONS HEREIN ARE BASED UPON THE ANTICIPATED PARCEL SIZE FOLLOWING THE MANCHESTER STREET WIDENING PROJECT.
- 6. OWNER OF RECORD:

MANCHESTER STREET CONCORD AUTO, LLC & MANCHESTER STREET CONCORD AUTO TIC, LLC 300 TRADE CTR STE 7700 WOBURN, MA 01801-7419 MCRD BK:3836 PG:2445

TOTAL IMPERVIOUS

7. THE SUBJECT PARCEL IS SPLIT ZONED TO INCLUDE BOTH THE HIGHWAY COMMERCIAL (CH) DISTRICT AND THE INDUSTRIAL (IN) DISTRICT. THE PARCEL LIES WITHIN THE AQUIFER PROTECTION DISTRICT (AP). THE PARCEL IS SUBJECT TO THE FOLLOWING DIMENSIONAL REGULATIONS PER THE CITY OF CONCORD, NH ZONING ORDINANCE:

	REQUIRED ('CH'   'IN')	EXISTING	PROPOSED
MIN. LOT AREA: LOT FRONTAGE: FRONT SETBACK: REAR SETBACK: SIDE SETBACK: IMP. LOT COVERAGE: BUILDING HEIGHT:	40,000 SF   40,000 SF	167,677.56 SF	166,322.32 SF
	200 FT   200 FT	350.17 FT	350.17 FT
	50 FT   50 FT	201.91 FT	>50 FT
	30 FT   30 FT	N/A	N/A
	25 FT   25 FT	29.78 FT	>25 FT
	80%   85%	38.96%*	78.94%
	45 FT   45FT	<35 FT	<35 FT
GROUND COVERAGE:	BUILDINGS	9,560 SF (5.70%)	9,560 SF (5.75%)
	PARKING/LOADING AREAS	54,482 SF (32.49%)	120,447 SF (72.42%)
	CONCRETE/SIDEWALKS	1,295 SF (0.77%)	1,295 SF (0.77%)

INTERIOR LANDSCAPING 5% MINIMUM 319 SF (0.01%) 6,807 SF (5.18%)

PRIOR TO THE MERGER OF 10 INTEGRA DRIVE AND 150 MANCHESTER STREET THE IMPERVIOUS LOT COVERAGE WAS 79.84% FOR 150 MANCHESTER STREET (EXISTING DEALERSHIP)

8. PARKING CALCULATIONS:

REQUIRED PARKING:

3,518 SF FLOOR AREA (EXISTING) @ 1 SPACE PER 600 SF = 5.86 SPACES 10 REPAIR BAYS (EXISTING) @ 4 SPACES PER 1 REPAIR BAY= 40 SPACES 36,937 SF DISPLAY AREA (EXISTING & PROPOSED) @ 1 SPACE PER 3000 SF = 15.51 SPACES TOTAL REQUIRED = 5.86 + 40 + 15.51 = 61.37 = 61 SPACES

65,337 SF (38.96%) 131,301 SF (78.94%)

PROPOSED PARKING: 73 EXISTING SPACES; 70 STANDARD AND 3 ACCESSIBLE (2 PROPOSED) 8. ON MARCH XX, 2025, THE CITY OF CONCORD ZONING BOARD OF ADJUSTMENT GRANTED VARIANCES TO ALLOW THE FOLLOWING:

SECTION 28-2-4(J) ALLOW THE SALE OR RENTAL OF MOTOR VEHICLES OTHER THAN CONSTRUCTION EQUIPMENT WHERE SUCH USE IS PROHIBITED IN THE IN-DISTRICT.

ON MARCH XX, 2025, THE CITY OF CONCORD PLANNING BOARD GRANTED THE FOLLOWING SITE PLAN REGULATION WAIVER(S) ON THE SUBJECT PARCEL ASSOCIATED WITH PHASE 1 SITE IMPROVEMENTS:

INTERCONNECTED PARKING LOTS SECTION 19.05 SIDEWALKS REQUIRED SECTION 21.02

FORMAT FOR INCLUSION IN THE CITY GIS DATABASE.

- 10. THE AREA OF LAND DISTURBANCE PROPOSED BY PHASE 1 OF THIS PROJECT IS APPROXIMATELY 94,000 SF. THE TOTAL LAND DISTURBANCE FOR THE PROJECT IS APPROXIMATELY 164,000 SF.
- 11. THIS PROJECT REQUIRES THE FOLLOWING STATE AND/OR FEDERAL PERMIT(S) ASSOCIATED WITH THE SITE DESIGN: FAA OBSTRUCTION EVALUATION: NHDES ALTERATION OF TERRAIN PERMIT:

DIVISION TO DISCUSS CONSTRUCTION REQUIREMENTS, SITE INSPECTIONS, ASSOCIATED FEES, SCHEDULES, ETC.

- 12. ALL WORK PERFORMED SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE CITY OF CONCORD CONSTRUCTION STANDARDS, AND CITY STANDARDS SHALL TAKE PRECEDENCE IN CASE OF OF ANY DETAILS OR PLANS IN CONFLICT.
- 13. ALL UTILITIES SHALL BE INSTALLED UNDERGROUND IN ACCORDANCE WITH SECTION 25.02(1) OF THE SITE PLAN REGULATIONS.
- 14. PER SITE PLAN REGULATION 12.09, UPON COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL SUBMIT AS-BUILT DRAWINGS TO THE ENGINEERING SERVICES DIVISION PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY. DURING PROJECT CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AS-BUILT SKETCHES OF ALL UNDERGROUND UTILITIES PRIOR TO BACKFILL AND PROVIDE TO ENGINEER OF RECORD. ALL INVERTS AND ELEVATIONS SHALL BE BASED ON A SURVEYED BENCHMARK PROVIDED BY THE SURVEYOR OF RECORD THE SURVEYOR SHALL PROVIDE AN AS-BUILT OF THE SITE

UTILIZING NH STATE PLANE GRID COORDINATES AND N.A.V.D. 88 DATUM AND SUBMIT TO THE ENGINEERING SERVICES DIVISION IN ELECTRONIC

- 15. PRIOR TO START OF ANY CONSTRUCTION THE CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION MEETING WITH THE ENGINEERING SERVICES
- 16. THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM THE ENGINEERING SERVICES DIVISION FOR WORK WITHIN THE RIGHT-OF-WAY.
- 17. THE CONTRACTOR SHALL OBTAIN A DRIVEWAY PERMIT FROM THE ENGINEERING SERVICES DIVISION FOR THE PROPOSED DRIVEWAY(S).
- 18. A TEMPORARY TRAFFIC CONTROL PLAN (TTCP) WILL BE REQUIRED FOR ALL WORK IN AND ADJACENT TO THE CITY RIGHT-OF-WAY THAT WILL REQUIRE LANE CLOSURES. THE TTCP SHALL BE SUBMITTED TO THE ENGINEERING SERVICES DIVISION FOR REVIEW AND APPROVAL A MINIMUM OF TWO WEEKS PRIOR TO THE CONSTRUCTION ACTIVITIES THAT REQUIRE LANE CLOSURE(S).
- 19. THIS PARCEL DOES NOT LIE WITHIN THE SHORELAND PROTECTION DISTRICT (SP). THIS SITE DOES NOT CONTAIN ANY JURISDICTIONAL WETLANDS, BLUFFS, OR STEEP SLOPES GREATER THAN 15% OR GREATER THAN 25%.
- 20. THE EXISTING DEALERSHIP IS SERVICED BY EXISTING DOMESTIC WATER AND SEWER SERVICES FROM THE CITY OF CONCORD MUNICIPAL SYSTEM(S).
- 21. THE EXISTING DEALERSHIP IS SERVICED BY AN AUTOMATIC FIRE SUPPRESSION SYSTEM SUPPLIED FROM A 6" SERVICE FROM THE CITY OF CONCORD MUNICIPAL WATER SUPPLY. UNOBSTRUCTED ACCESS TO THE STRUCTURE IS PROVIDED FROM THE MANCHESTER STREET ACCESS POINT TO THE NORTHWEST ENTRY TO THE EXISTING STRUCTURE.

# GRAPHIC SCALE ( IN FEET )

1 inch = 40 ft.

## SITE PLAN

PREPARED FOR:

# CAPITAL CITY SUBARU

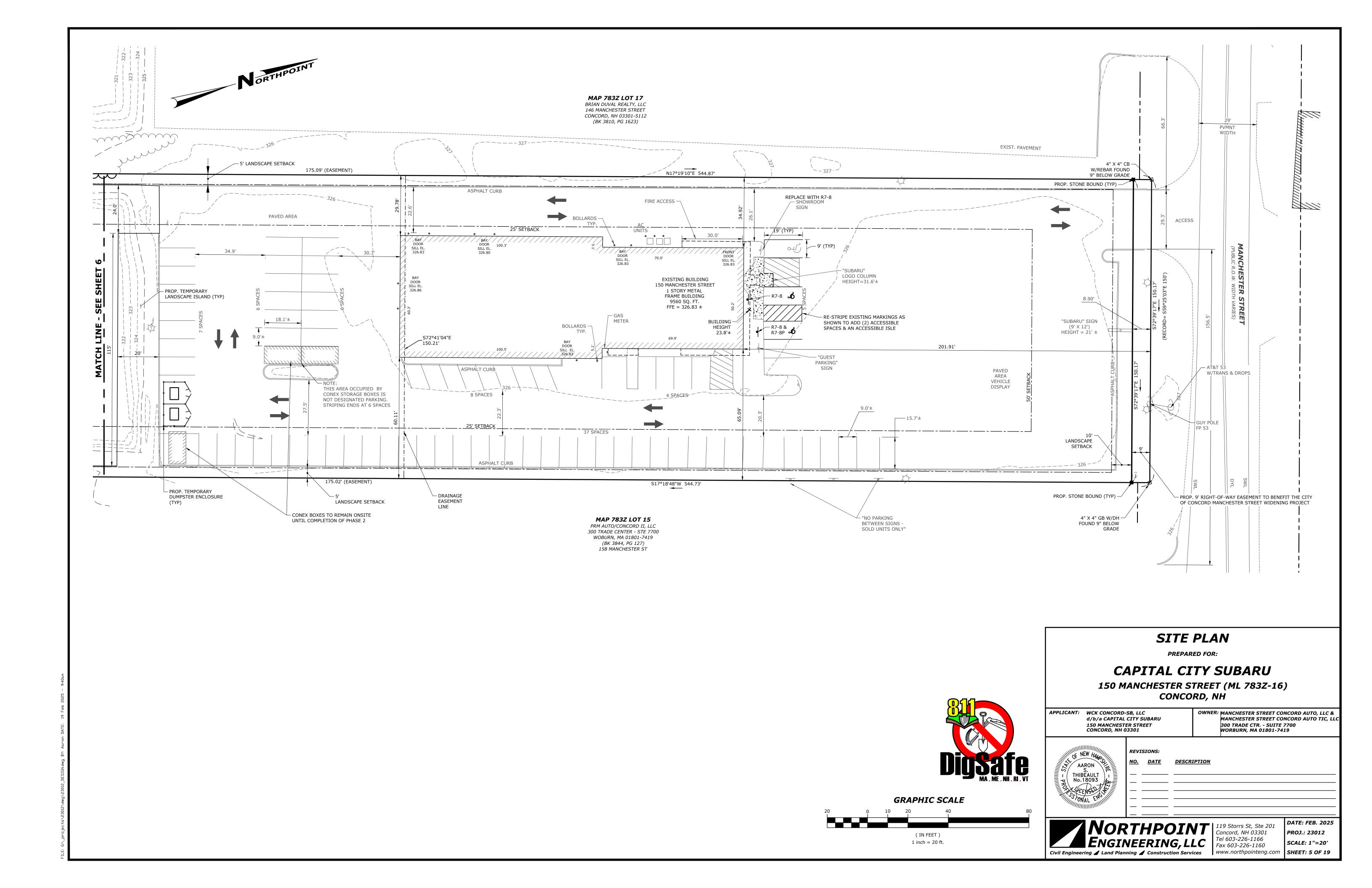
150 MANCHESTER STREET (ML 783Z-16) CONCORD, NH

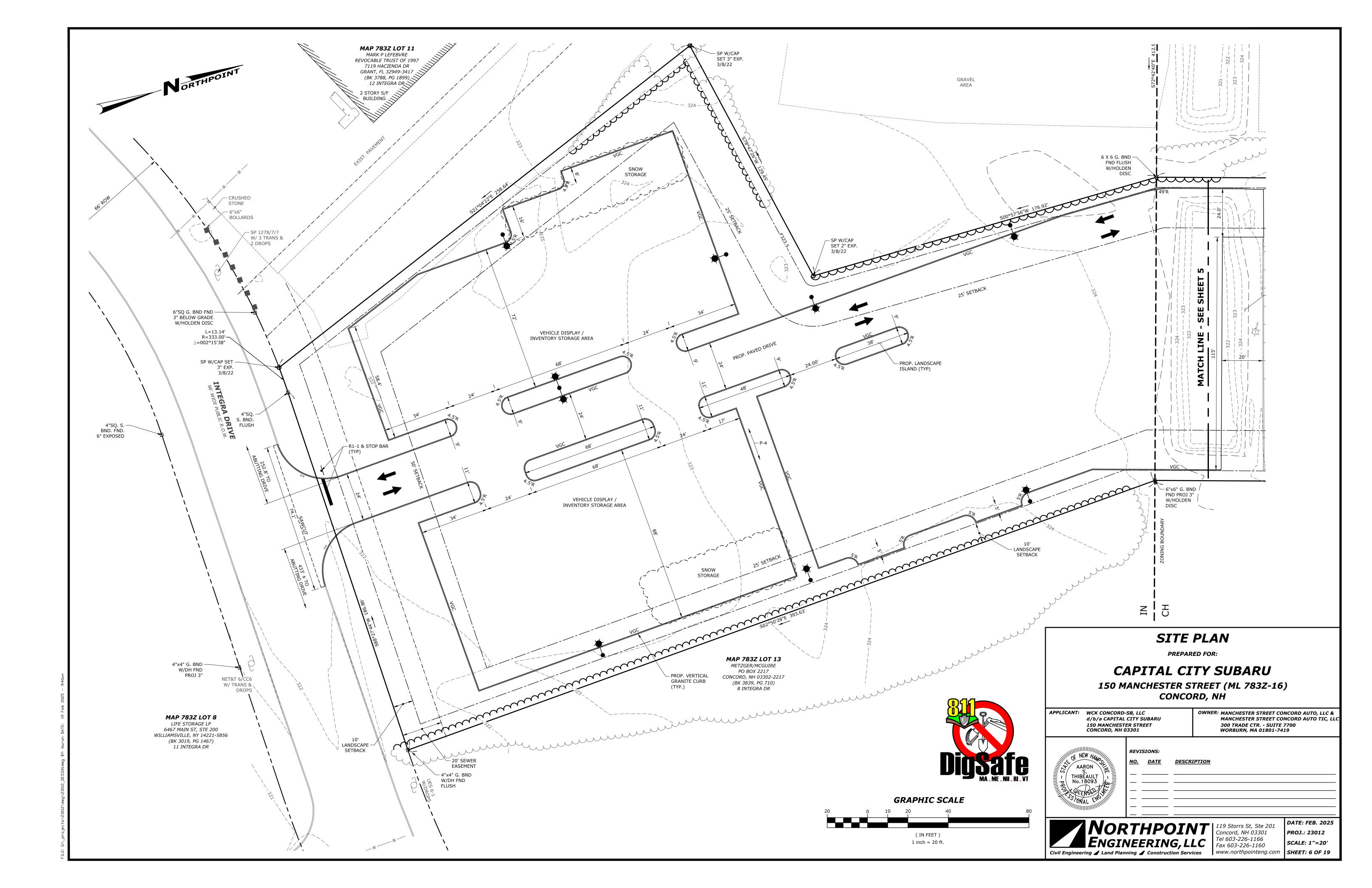
APPLICANT: WCK CONCORD- d/b/a CAPITAL 150 MANCHEST CONCORD, NH C	CITY SUBARU ER STREET	OWNER: MANCHESTER STREET CONCORD AUTO, LLC & MANCHESTER STREET CONCORD AUTO TIC, LLC 300 TRADE CTR SUITE 7700 WORBURN, MA 01801-7419
AARON S. THIBEAULT No.18093 PROTECTION OF NEW HAMOST PROTECTION OF NEW	REVISIONS:         NO.       DATE       DE         —       —       —         —       —       —         —       —       —         —       —       —         —       —       —         —       —       —         —       —       —         —       —       —         —       —       —         —       —       —	SCRIPTION
		DATE: FEB. 2025

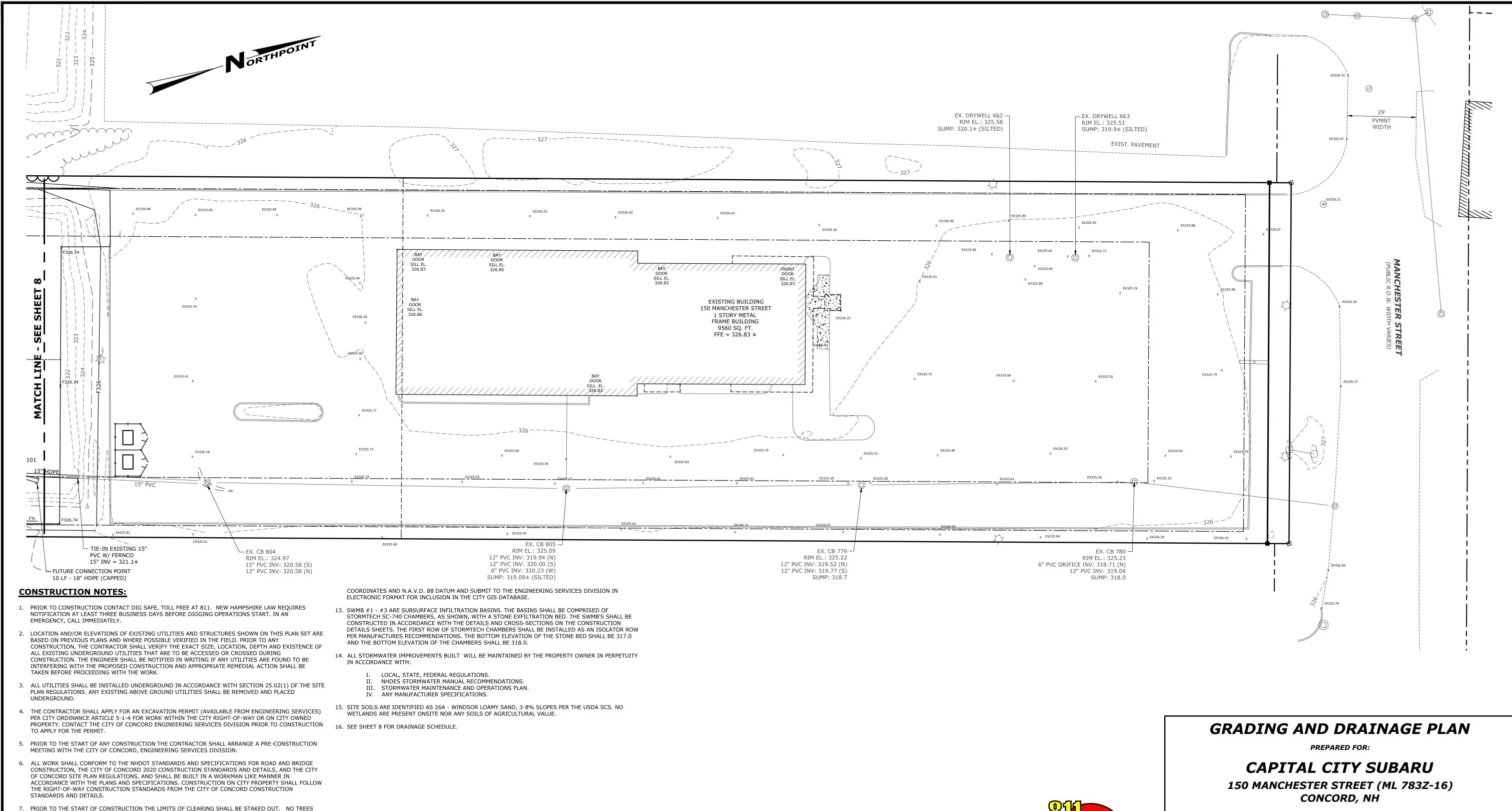
Civil Engineering Land Planning Construction Services | www.northpointeng.com

Fax 603-226-1160

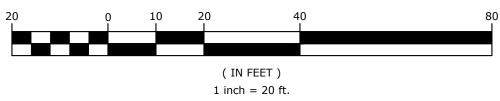
PROJ.: 23012 SCALE: 1"=40' SHEET: 4 OF 19







# GRAPHIC SCALE



CONCORD, NH 03301			WORBURN, MA 01801-7419	
AARON S. THIBEAULT No.18093 OWAL ENGINEERING	REVISIONS:  NO. DATE	DESCRIPTION		

NORTHPOINT Concord, NH 03301 Tel 603-226-1166 Fax 603-226-1160 Civil Engineering Land Planning Construction Services www.northpointeng.com

APPLICANT: WCK CONCORD-SB, LLC

d/b/a CAPITAL CITY SUBARU

150 MANCHESTER STREET

DATE: FEB. 2025 PROJ.: 23012 SCALE: 1"=20' SHEET: 7 OF 19

OWNER: MANCHESTER STREET CONCORD AUTO, LLC &

300 TRADE CTR. - SUITE 7700

MANCHESTER STREET CONCORD AUTO TIC, LLC

8. PROPOSED UNDERGROUND UTILITIES TO INCLUDE CONDUIT FOR ELECTRIC AND CABLE. TRENCH AND CONDUIT SIZE, NUMBER, AND DEPTH PER TYPICAL DETAIL PROVIDED BY SPECIFIC UTILITY PROVIDERS.

REMAIN IN PLACE AT ALL TIMES DURING CONSTRUCTION, AND UNTIL FINAL STABILIZATION HAS

9. STORM DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. ALL PIPE MATERIAL SHALL BE ADS N-12 DUAL WALL PIPE (OR APPROVED EQUAL) UNLESS OTHERWISE NOTED ON PLANS. CONSTRUCTION METHODS SHALL CONFORM TO CITY OF CONCORD STANDARD

SHALL BE CUT BEYOND THE LIMITS SHOWN ON THIS PLAN AND TEMPORARY FENCING SHALL BE INSTALLED

EROSION CONTROL MEASURES SHOWN ON THE EROSION CONTROL PLAN SHALL BE INSTALLED AND SHALL

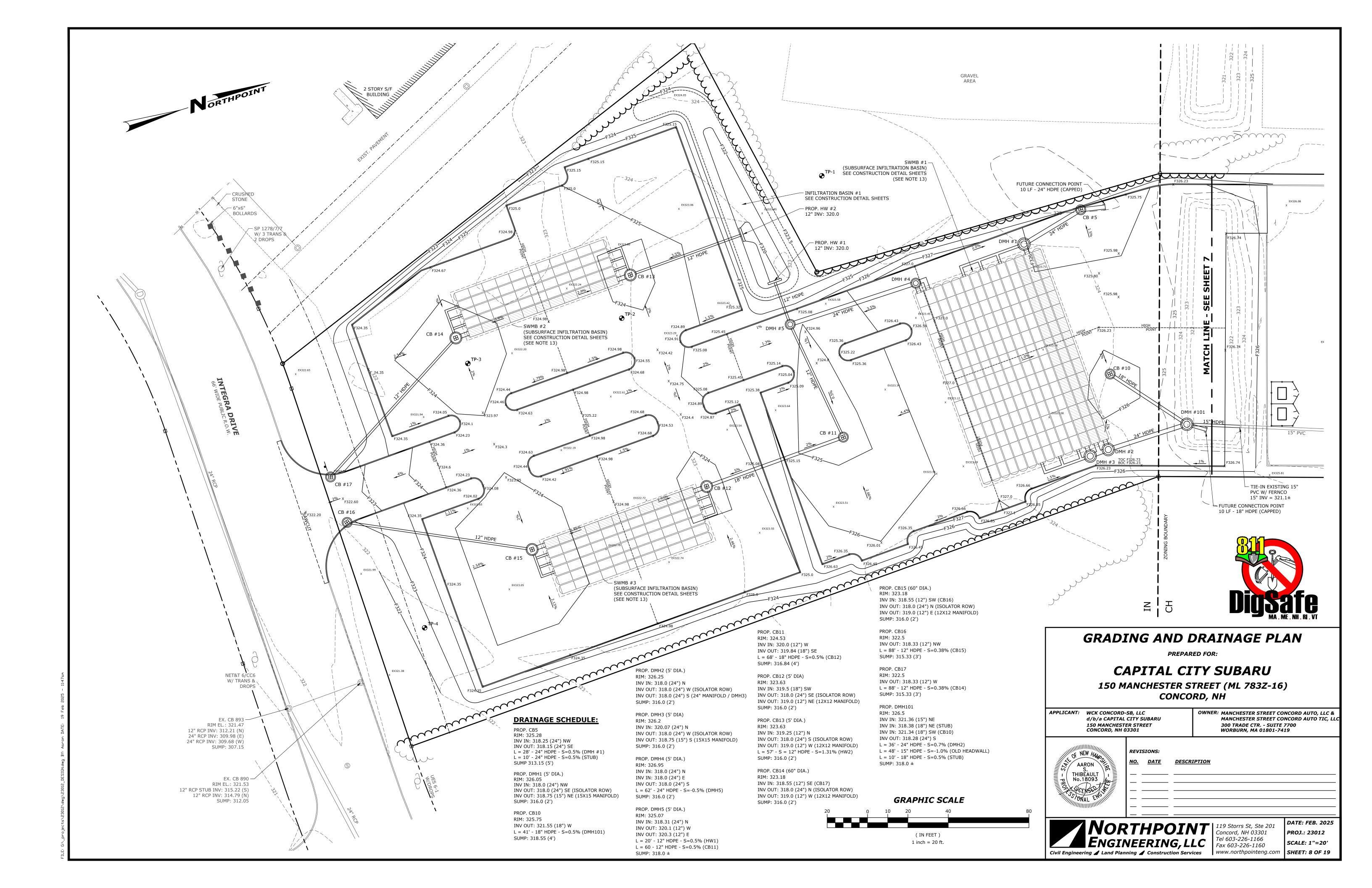
AROUND THE LIMITS OF CLEARING PRIOR TO CLEARING TO ENSURE THAT NO ADDITIONAL TREES ARE

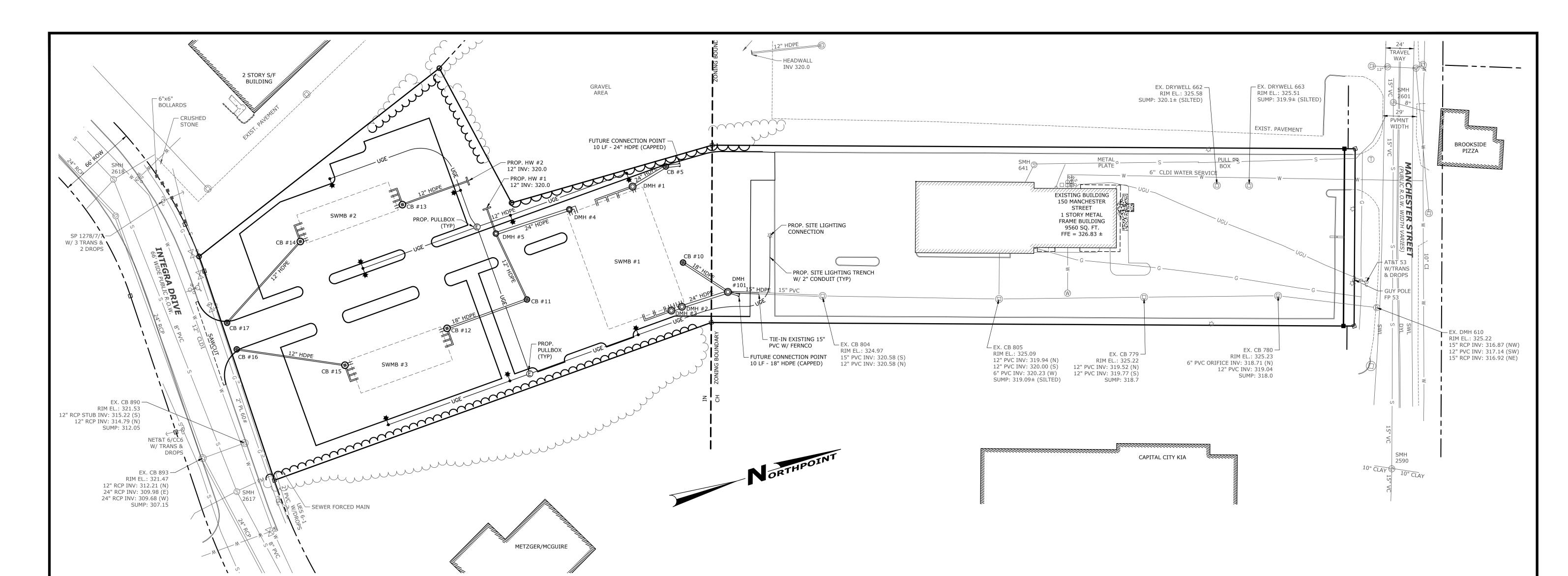
DAMAGED DURING CONSTRUCTION. IMMEDIATELY AFTER CLEARING HAS OCCURRED, ALL TEMPORARY

10. ALL CONSTRUCTION DEBRIS, INCLUDING STUMPS, SHALL BE REMOVED FROM THE JOB SITE AND DISPOSED OF PROPERLY OFFSITE, UNLESS OTHERWISE APPROVED.

11. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE PERMANENTLY STABILIZED WITH 6" OF LOAM AND SEED, PER THE TURF ESTABLISHMENT SCHEDULE. REFER TO THE EROSION CONTROL PLANS FOR ADDITIONAL REQUIREMENTS FOR TEMPORARY AND PERMANENT STABILIZATION PRACTICES IN CERTAIN AREAS OF THE SITE AS MAY BE APPLICABLE.

12. DURING PROJECT CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AS-BUILT SKETCHES OF ALL UNDERGROUND UTILITIES PRIOR TO BACKFILL AND PROVIDE TO ENGINEER OR RECORD. ALL INVERTS AND ELEVATIONS SHALL BE BASED ON A SURVEYED BENCHMARK PROVIDED BY THE SURVEYOR OF RECORD THE SURVEYOR SHALL PROVIDE AN AS-BUILT OF THE SITE UTILIZING NH STATE PLANE GRID





### **CONSTRUCTION NOTES:**

- PRIOR TO CONSTRUCTION CONTACT DIG SAFE, TOLL FREE AT 811. NEW HAMPSHIRE LAW REQUIRES NOTIFICATION AT LEAST THREE BUSINESS DAYS BEFORE DIGGING OPERATIONS START. IN AN EMERGENCY, CALL IMMEDIATELY.
- 2. LOCATION AND/OR ELEVATIONS OF EXISTING UTILITIES AND STRUCTURES SHOWN ON THIS PLAN SET ARE BASED ON PREVIOUS PLANS AND WHERE POSSIBLE VERIFIED IN THE FIELD. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT SIZE, LOCATION, DEPTH AND EXISTENCE OF ALL EXISTING UNDERGROUND UTILITIES THAT ARE TO BE ACCESSED OR CROSSED DURING CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING IF ANY UTILITIES ARE FOUND TO BE INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK.
- 3. ALL UTILITIES SHALL BE INSTALLED UNDERGROUND IN ACCORDANCE WITH SECTION 25.02(1) OF THE SITE PLAN REGULATIONS. ANY EXISTING ABOVE GROUND UTILITIES SHALL BE REMOVED AND PLACED UNDERGROUND.
- 4. SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT AS NEEDED FOR UTILITY TRENCH WORK.
- 5. THE CONTRACTOR SHALL APPLY FOR AN EXCAVATION PERMIT (AVAILABLE FROM ENGINEERING SERVICES) PER CITY ORDINANCE ARTICLE 5-1-4 FOR WORK WITHIN THE CITY RIGHT-OF-WAY OR ON CITY OWNED PROPERTY. CONTACT THE CITY OF CONCORD ENGINEERING SERVICES DIVISION PRIOR TO CONSTRUCTION TO APPLY FOR THE PERMIT.
- 6. PRIOR TO THE START OF ANY CONSTRUCTION THE CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION MEETING WITH THE CITY OF CONCORD, ENGINEERING SERVICES DIVISION.
- 7. ALL WORK SHALL CONFORM TO THE NHDOT STANDARDS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE CITY OF CONCORD 2020 CONSTRUCTION STANDARDS AND DETAILS, AND THE CITY OF CONCORD SITE PLAN REGULATIONS, AND SHALL BE BUILT IN A WORKMAN LIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. CONSTRUCTION ON CITY PROPERTY SHALL FOLLOW THE RIGHT-OF-WAY CONSTRUCTION STANDARDS FROM THE CITY OF CONCORD CONSTRUCTION STANDARDS AND DETAILS.
- 8. PROPOSED UNDERGROUND UTILITIES TO INCLUDE CONDUIT FOR ELECTRIC AND CABLE. TRENCH AND CONDUIT SIZE, NUMBER, AND DEPTH PER TYPICAL DETAIL PROVIDED BY SPECIFIC UTILITY
- 9. DURING PROJECT CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AS-BUILT SKETCHES OF ALL UNDERGROUND UTILITIES PRIOR TO BACKFILL AND PROVIDE TO ENGINEER OR RECORD. ALL INVERTS AND ELEVATIONS SHALL BE BASED ON A SURVEYED BENCHMARK PROVIDED BY THE SURVEYOR OF RECORD THE SURVEYOR SHALL PROVIDE AN AS-BUILT OF THE SITE UTILIZING NH STATE PLANE GRID COORDINATES AND N.A.V.D. 88 DATUM AND SUBMIT TO THE ENGINEERING SERVICES DIVISION IN ELECTRONIC FORMAT FOR INCLUSION IN THE CITY GIS DATABASE.



# GRAPHIC SCALE ( IN FEET ) 1 inch = 40 ft.

# **UTILITIES PLAN**

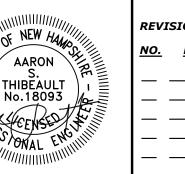
PREPARED FOR:

# CAPITAL CITY SUBARU

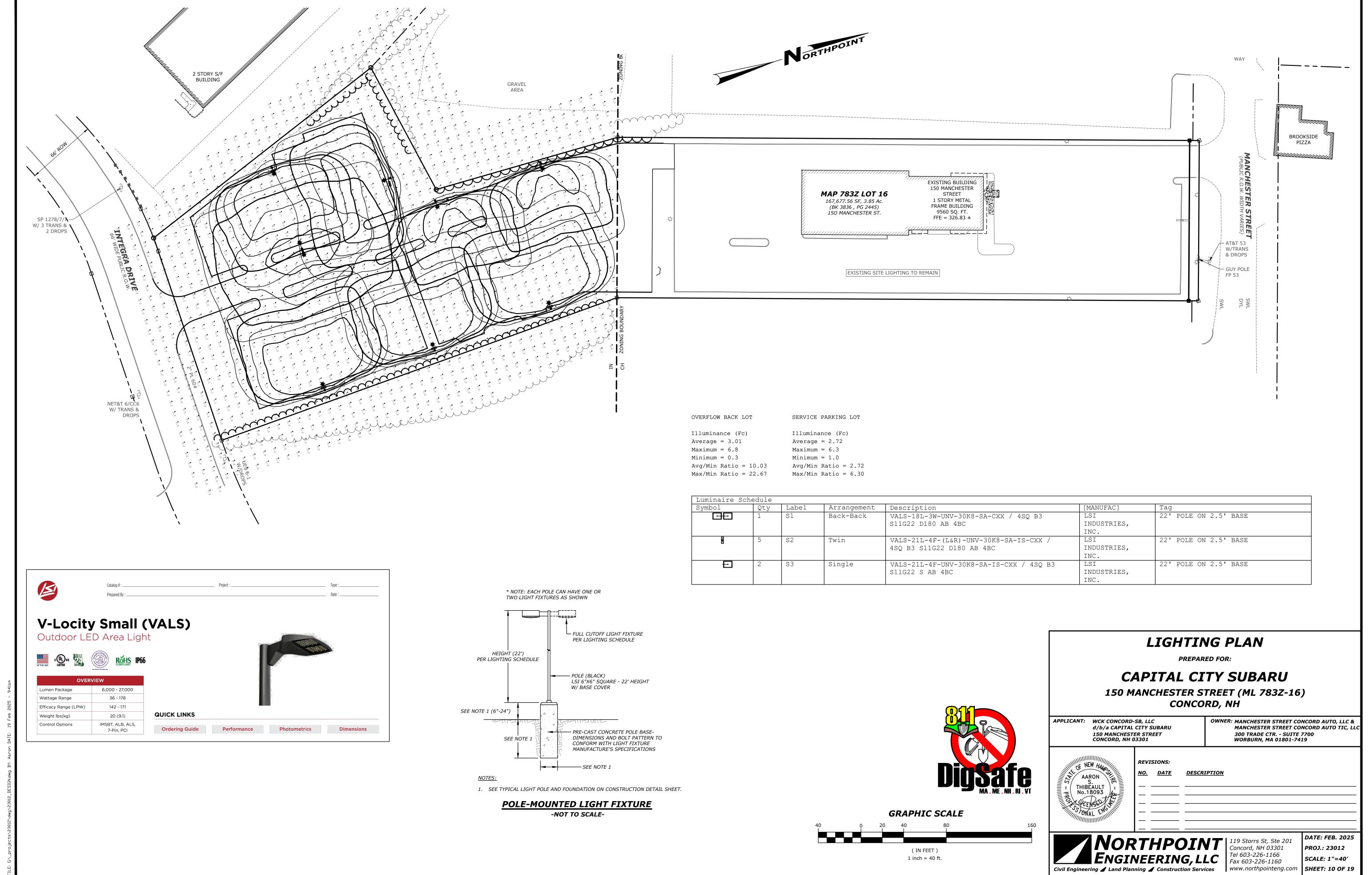
150 MANCHESTER STREET (ML 783Z-16) CONCORD, NH

AARON S. THIBEAULT No.18093 — — — — — — — — — — — — — — — — — — —	CONCORD, NH	)3301
A CONTINUES	To the	REVIS.   NO.
		l —  –

APPLICANT: WCK CONCORD-SB, LLC OWNER: MANCHESTER STREET CONCORD AUTO, LLC & d/b/a CAPITAL CITY SUBARU MANCHESTER STREET CONCORD AUTO TIC, LLC 150 MANCHESTER STREET 300 TRADE CTR. - SUITE 7700 WORBURN, MA 01801-7419



DATE: FEB. 2025 PROJ.: 23012 Tel 603-226-1166 Fax 603-226-1160 SCALE: 1"=40' SHEET: 9 OF 19



SHEET: 10 OF 19

ZONING REQUIREMENTS 28-7-10 - PARKING AREA LANDSCAPING STANDARDS (<375 SPACES)

- (a) PARKING LOT PERIMETER LANDSCAPING REQUIRED: - 10' PERIMETER ALONG COLLECTOR AND ARTERIAL STREETS - 5' PERIMETER OTHERWISE
- (b) PARKING LOT INTERIOR LANDSCAPING REQUIRED - OFF-STREET PARKING FOR FIFTY (50) OR MORE VEHICLES IS REQUIRED, THERE SHALL BE LANDSCAPED OPEN SPACE WITHIN THE PERIMETER OF THE PARKING LOT IN THE MINIMUM AMOUNT OF FIVE (5) PERCENT OF THE GROSS PARKING LOT AREA

SOUTH PARKING LOT: 68,560 SF GPA X 0.05 = 3,428 SF REQUIRED= 4,083 SF (5.9%) PROPOSED

(d) LANDSCAPE MATERIAL STANDARDS:

ALL LANDSCAPED AREAS REQUIRED BY THIS ARTICLE SHALL CONTAIN NO LESS THAN ONE LIVE SHADE OR ORNAMENTAL TREE FOR EVERY TWO THOUSAND (2,000) SQUARE FEET OF PARKING AREA. SUCH TREES SHALL HAVE A MINIMUM TRUNK DIAMETER (MEASURED TWELVE (12) INCHES ABOVE THE GROUND LEVEL) OF NOT LESS THAN TWO (2) INCHES AND SHALL BE PLANTED NOT MORE THAN FIFTY (50) FEET APART WITHIN EACH CONTIGUOUS LANDSCAPED AREA. ALL LANDSCAPED AREAS SHALL CONTAIN SHRUB AND GROUND COVER PLANTING.

SOUTH PARKING LOT: 68,560 SF GPA / 2,000 SF = 34 TREES REQUIRED

#### SITE PLAN REQUIREMENTS 18.17 TREE PLANTINGS:

TREE PLANTINGS IN AND AROUND PARKING AREAS SHALL BE PROVIDED AS SET FORTH IN ARTICLE 28-7, ACCESS CIRCULATION AND PARKING OF THE CITY OF CONCORD ZONING ORDINANCE, AND SECTION 27, LANDSCAPING AND EROSION CONTROL OF THESE REGULATIONS. ONE TREE SHALL BE PLANTED FOR EACH 1000 SQUARE FEET OF ANY PROPOSED PARKING AREA INCLUDING PARKING SPACES, INTERNAL LANDSCAPE ISLANDS, ACCESS AISLES, DRIVEWAYS, FIRE LANES, AND OTHER VEHICULAR CIRCULATION AREAS. PERIMETER LANDSCAPING, SIDEWALKS, PATIOS, IMPERVIOUS VEHICULAR STORAGE AREAS FOR THE SALE AND RENTAL OF VEHICLES, AND PAVED OUTSIDE STORAGE AREAS, WHERE ALLOWED, SHALL NOT BE INCLUDED IN THE AREA USED TO DETERMINE THE AMOUNT OF TREE PLANTING REQUIRED. TREES REQUIRED SHALL BE PLANTED WITHIN THE INTERNAL PARKING LOT ISLANDS, AROUND THE PERIMETER OF THE PARKING AREA WITHIN TWENTY (20) FEET OR THE PARKING LOT, OR IN LANDSCAPED AREAS BETWEEN BUILDINGS AND THE PARKING FIELD. EXISTING TREES PRESERVED ON THE SITE MAY COUNT ON A ONE FOR ONE BASIS WHEN LOCATED WITHIN TWENTY (20) FEET OF ANY PARKING LOT, ACCESS AISLE, VEHICULAR SALE OR RENTAL AREA, DRIVEWAY OR LOADING AREA.

SOUTH PARKING LOT: (VEHICLE DISPLAY/STORAGE IS NOT AN ALLOWED USE, ALL PAVEMENT SHALL COMPLY) 68,560 SF GPA / 1,000 SF = 69 TREES REQUIRED

27.06 PLACEMENT OF LANDSCAPE MATERIAL:

(1) DISTRIBUTION: STREET TREES SHALL BE PLANTED BETWEEN TWENTY (20) FEET AND FORTY (40) FEET APART.

27.07 REQUIRED LANDSCAPING IMPROVEMENTS:

(2) LANDSCAPE BUMPOUTS AND ISLANDS: LANDSCAPE BUMPOUTS AND ISLANDS WITHIN PARKING LOTS SHALL CONTAIN A MINIMUM OF ONE (1) DECIDUOUS SHADE TREE AND SHALL BE PROTECTED WITH CURBING.

(4) BIODIVERSITY: PROPOSED TREES SHALL BE SELECTED TO ENCOURAGE BIOLOGICAL DIVERSITY. NO MORE THAN TWENTY FIVE (25%) PERCENT OF THE TREES TO BE PLANTED IN ANY DEVELOPMENT SHALL BE OF THE SAME SPECIES. WHEN MORE THAN 100 TREES ARE TO BE PLANTED, NO SINGLE TREE SPECIES SHALL CONSIST OF MORE THAN FIFTEEN PERCENT (15%) OF THE TOTAL PLANTED. NO MORE THAN TWENTY FIVE PERCENT (25%) OF THE TREES TO BE PLANTED SHALL BE CLASSIFIED AS ORNAMENTAL TREES, AND THE BALANCE OF THE REQUIRED TREES SHALL BE DECIDUOUS SHADE TREES.

#### LANDSCAPE NOTES:

 ALL PLANT MATERIALS USED SHALL BE NURSERY STOCK AND SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF INSTALLATION. ANY MATERIAL WHICH DIES OR DOES NOT SHOW HEALTHY APPEARANCE WITHIN THIS TIME SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE; WITH SAME WARRANTY REQUIREMENTS AS THE ORIGINAL. WARRANTIES TYPICALLY DO NOT COVER LOSS DUE TO INSECT INFESTATION

2. A TOPSOIL MIXTURE SHALL BE USED TO BACKFILL THE HOLE AS FOLLOWS; ORGANIC TOPSOIL, AMENDED WITH 10% WOOD ASH, 10% MANURE, 30% PEATMOSS AND A GRANULAR HYDROGEL TO ABSORB AND RETAIN

3. UNSUITABLE MATERIAL ENCOUNTERED IN PLANTING AREAS SHALL BE REMOVED AND REPLACED WITH TOPSOIL MIXTURE NOTED ABOVE. THE AREA OF REMOVAL SHALL BE TWICE THE DIAMETER OF THE ROOT BALL FOR THE SPECIFIED PLANT MATERIAL.

4. ALL TREES CALIPERS SHALL BE MEASURED FROM A HEIGHT OF 12" ABOVE THE GROUND. ALL TREES ARE

5. ANY PROPOSED PLANT SUBSTITUTIONS SHALL BE REVIEWED BY THE LANDSCAPE ARCHITECT AND APPROVED BY THE LOCAL JURISDICTION PRIOR TO PLANTING. 6. CONTRACTOR SHALL INSTALL SNOW FENCING AT DRIP LINE OF TREES TO BE SAVED TO PROTECT FROM ROOT

COMPACTION AND ROOTS ARE TO BE CUT BY HAND WHERE THEY INTERFERE WITH UTILITIES, CURBING AND

7. PARKING, AND THE STORAGE AND DISPLAY OF VEHICLES, GOODS, AND MATERIALS ARE PROHIBITED WITHIN PERIMETER LANDSCAPING AREAS, RESIDENTIAL DISTRICT BUFFERS, AND INTERIOR PARKING LOT LANDSCAPED AREAS. INTERNAL PARKING LOT ISLANDS SHALL EITHER BE GRASSED OR PLANTED WITH GROUND COVER. NON-ORGANIC MULCH, STONE, OR LANDSCAPED FABRIC IS NOT ALLOWED IN REQUIRED LANDSCAPE AREAS.

8. ALL LANDSCAPED AREAS INCLUDING LAWNS SHALL BE PROVIDED WITH UNDERGROUND IRRIGATION. SEE IRRIGATION

9. UNDERGROUND UTILITIES: NO TREES SHALL BE PLANTED WITHIN TEN (10) FEET OF AN EXISTING OR PROPOSED UNDERGROUND UTILITY LINE EXCEPT FOR THE

SITE IRRIGATION LINES TO SPRINKLER HEADS;

ELECTRICAL SERVICE LINES TO EXTERIOR LIGHTS, WELL PUMPS OR OTHER SMALL FIXTURES AND EOUIPMENT:

TELECOMMUNICATION SERVICE LINES TO EXTERIOR EMERGENCY PHONES OR OTHER SIMILAR COMMUNICATION OTHER MINOR SERVICE LINES WHICH WILL NOT BE DAMAGED BY TREE ROOTS, OR CAN BE REPAIRED AND REPLACED WITHOUT DAMAGING EXISTING, OR PROPOSED TREES ON, OR ABUTTING, THE SITE.

10. ALL OPEN SPACE AREAS NOT COVERED WITH NATURAL VEGETATION SHALL BE COVERED WITH GRASS OR OTHER VEGETATIVE GROUNDCOVERS, WITH THE EXCEPTION OF PLANTING BEDS WHICH MAY BE MULCHED.

### **IRRIGATION NOTES:**

- THE IRRIGATION SYSTEM SHALL BE DESIGNED BY AN APPROVED IRRIGATION DESIGN/BUILD CONTRACTOR OR BY AN APPROVED EQUAL, TO BE DETERMINED BY THE OWNERS REPRESENATIVE/LANDSCAPE ARCHITECT.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THE IRRIGATION SYSTEM DESIGN AND SHOP DRAWINGS TO THE OWNER 30 DAYS PRIOR TO THE START OF
- THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING AND PROPOSED UTILITIES AND NOTIFY THE OWNER'S REPRESENTATIVE OF CONFLICTS.
- THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR, BUT NOT LIMITED TO, THE COMPLETE INSTALLATION OF THE IRRIGATION SYSTEM AND SHALL FOLLOW ALL APPLICABLE CODES.
- 5. REFER TO ARCHITECTURAL PLANS FOR LOCATION OF THE IRRIGATION SYSTEM'S BUILDING CONNECTION.
- REFER TO MANUFACTURER'S INSTRUCTIONS AND PRODUCT SPECIFICATIONS FOR INSTALLATION.

#### PROPOSED PLANTING SCHEDULE

SYMBOL	QTY	BOTANICAL NAME COMMON NAME	SIZE REMARKS	
SHADE TREES				
AB +	16	ACER R. 'BOWHALL' BOWHALL RED MAPLE	2 1/2″ TO 3″ CAL.	B&B
A   (e)	9	ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE	2 1/2" TO 3" CAL.	B&B
BD D	9	BETULA N. 'DURA HEAT' DURA HEAT RIVER BIRCH	12' TO 14' CLUMP	B&B
GS ( S)	8	GLEDISTA T.I. 'SUNBURST' SUNBURST HONEYLOCUST	2 1/2" TO 3" CAL.	B&B
РВ 💙	11	PLATANUS X ACREIFOLIA 'BLOODGOOD' BLOODGOOD LONDON PLANETREE	2 1/2" TO 3" CAL.	B&B
QP LACA	11	QUERCUS PALUSTRIS 'GREEN PILLAR' GREEN PILLAR PIN DAK	2 1/2" TO 3" CAL.	B&B
ZV & +	4	ZELKOVA SERRATA 'VILLAGE GREEN' VILLAGE GREEN ZELKOVA	2 1/2" TO 3" CAL.	B&B
SHRUBS				
FL ⊕	8	FORSYTHIA 'LYNWOOD GOLD' LYNWOOD GOLD FORSYTHIA	3' TO 4'	B&B
JC ∰	8	JUNIPERUS C. 'SEAGREEN' SEAGREEN JUNIPER	3 GAL.	CONT.
JH ⊕	20	JUNIPERUS H. 'PLUMOSA COMPACTA' YOUNGTOWN JUNIPER	3 GAL.	CONT.
мр О	9	MYRICA PENSYLVANICA NORTHERN BAYBERRY	5 GAL.	CDNT.
SL 🛠	25	SPIRAEA J. 'LITTLE PRINCESS' LITTLE PRINCESS SPIREA	3 GAL.	CDNT.
тт 🕸	50	THUJA O. 'TECHNY' MISSION ARBORVITAE	5′ TO 6′	B&B

I,  $\underline{\mathsf{MICHAEL}}$  S. KRZEMINSKI, HEREBY CERTIFY THAT I AM THE DESIGNER OF THIS LANDSCAPE PLAN AND THAT I AM A PROFESSIONAL LANDSCAPE ARCHITECT LICENSED BY THE STATE OF NEW HAMPSHIRE.



## TURF ESTABLISHMENT SCHEDULE:

- PLACE 4-INCH (MINIMUM) COMPACTED THICKNESS OF CLEAN SUITABLE LOAM. RAKE OUT LOAM TO FREE SOIL OF DEBRIS AND STONES GREATER THAN 1-INCH IN
- 3. FINE GRADE SURFACE AND SUPPLEMENT WITH LOAM WHERE NEEDED TO CREATE A UNIFORM
- 4. APPLY AGRICULTURAL LIMESTONE AT A RATE OF 11-POUNDS PER 1,000 S.F.

### SEEDING SPECIFICATIONS:

- 1. SEED SHALL BE SPREAD UNIFORMLY BY BROADCASTING, DRILLING OR HYDROSEEDING. IF HYDROSEEDING, USE 4-TIMES THE RECOMMENDED RATE OF INOCULANT.
- SEEDING FOR PERMANENT COVER SHALL OCCUR BETWEEN APRIL 15 AND OCTOBER WHEN SEEDING BETWEEN MAY 15 AND SEPTEMBER 1, ALL AREAS SEEDED SHALL BE
- MULCHED WITH HAY, STRAW OR OTHER ACCEPTABLE MATERIAL AT A RATE OF 2-TONS PER
- 3. SEED MIXTURE FOR LAWN AREAS SHALL CONTAIN 45% TALL FESCUE, 45% CREEPING RED FESCUE, AND 10% REDTOP APPLIED AT A RATE OF 4.5-POUNDS PER 1,000 S.F..
- ALL STEEP SLOPE AREAS (3: 1 OR STEEPER) SHALL BE HYDROSEEDED WITH A SEED MIXTURE CONTAINING 25% PERENNIAL RYEGRASS, 50% CROWNVETCH AND 25% WILDFLOWER MIX APPLIED AT A RATE OF 4.5 POUNDS PER 1,000 S.F.

## LANDSCAPE PLAN

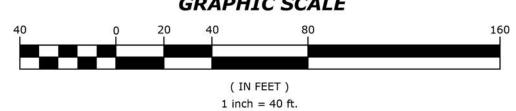
PREPARED FOR:

## CAPITAL CITY SUBARU

150 MANCHESTER STREET (ML 783Z-16) CONCORD, NH



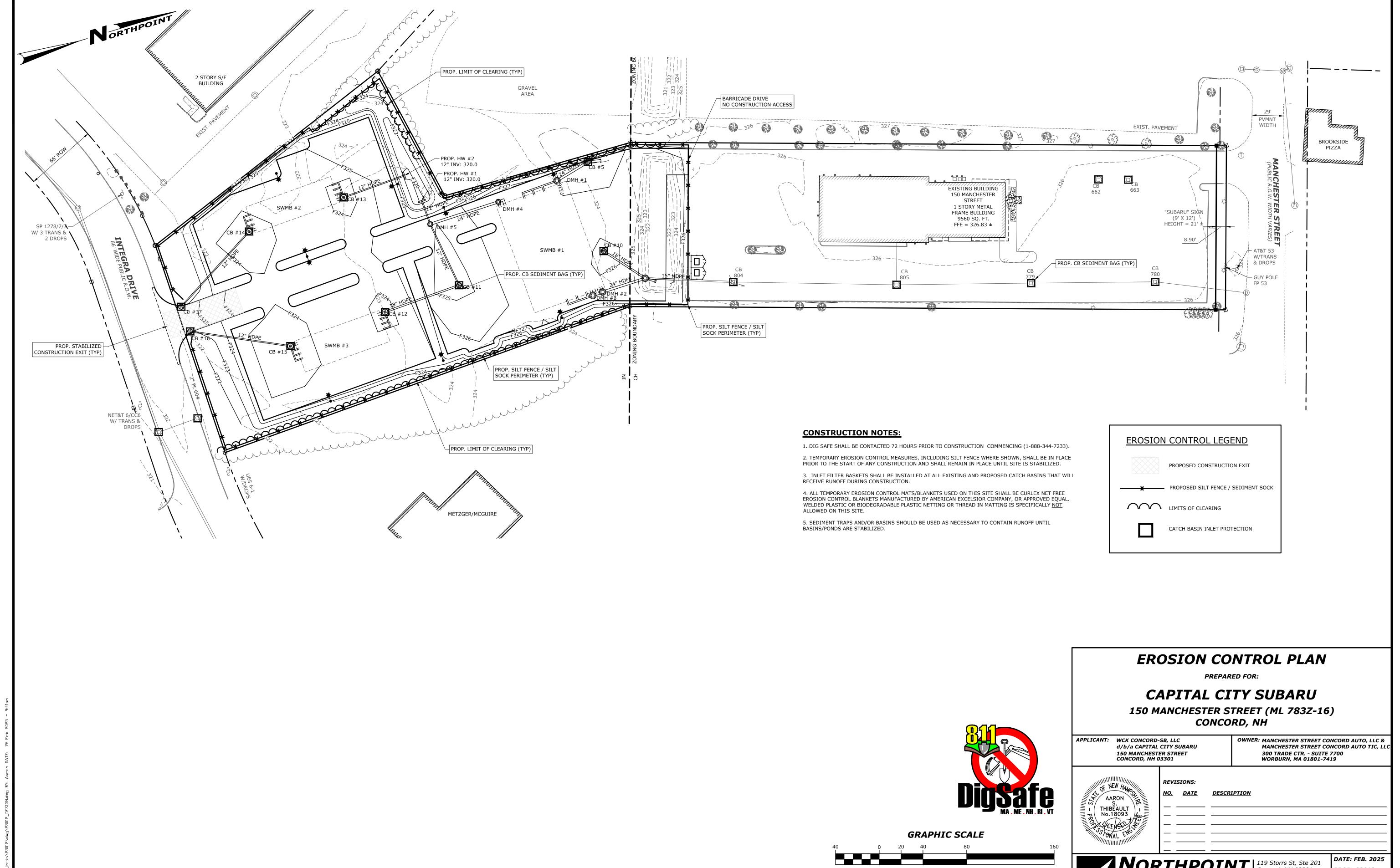
GRAPHIC SCALE



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APPLICANT:	WCK CONCORD- d/b/a CAPITAL 150 MANCHEST CONCORD, NH 0	CITY SUBARU ER STREET	OWNER: MANCHESTER STREET OF MANCHESTER STREET OF STREET	CONCORD AUTO TIC, LLC E 7700
		REVISIONS:  NO. DATE DESC	CRIPTION	
	<b>IN</b> OR	THPOT	119 Storrs St, Ste 201	DATE: FEB. 2025

**ENGINEERING, LLC**Tel 603-226-1166
Fax 603-226-1160 Civil Engineering Land Planning Construction Services www.northpointeng.com

SCALE: 1"=40' SHEET: 11 OF 19



( IN FEET ) 1 inch = 40 ft. DATE: FEB. 2025

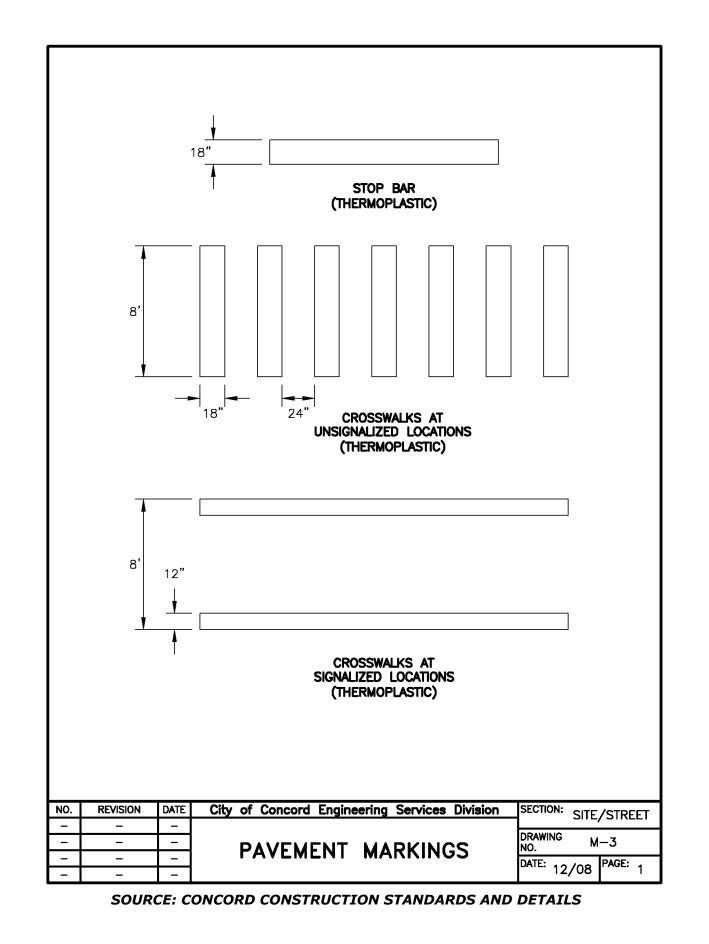
NH 03301
226-1166
-226-1160
thpointeng.com

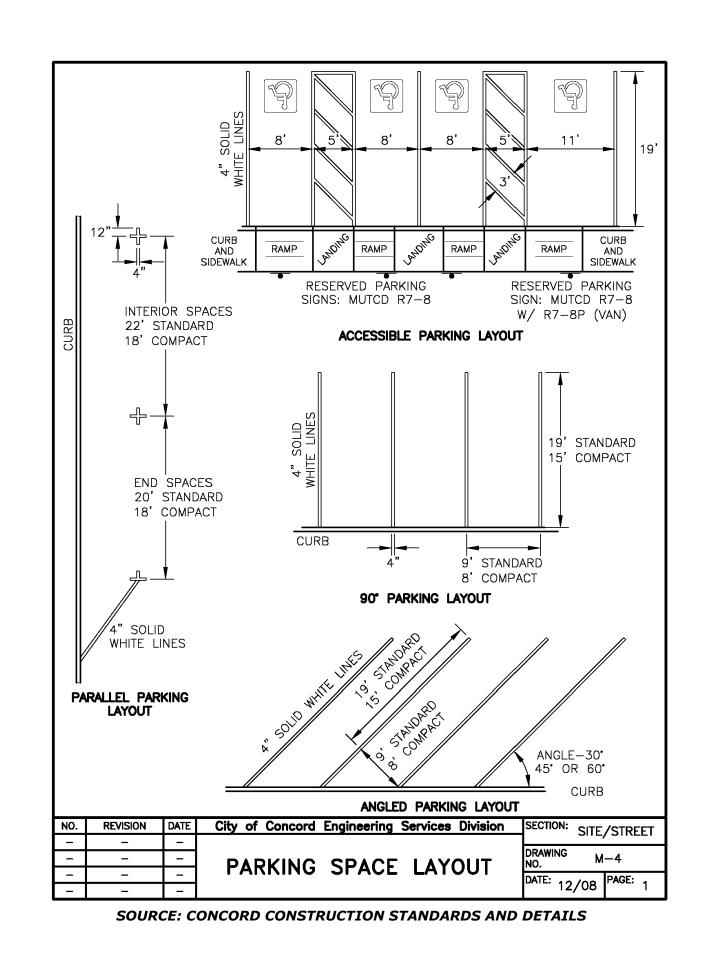
PATE: FEB. 2025

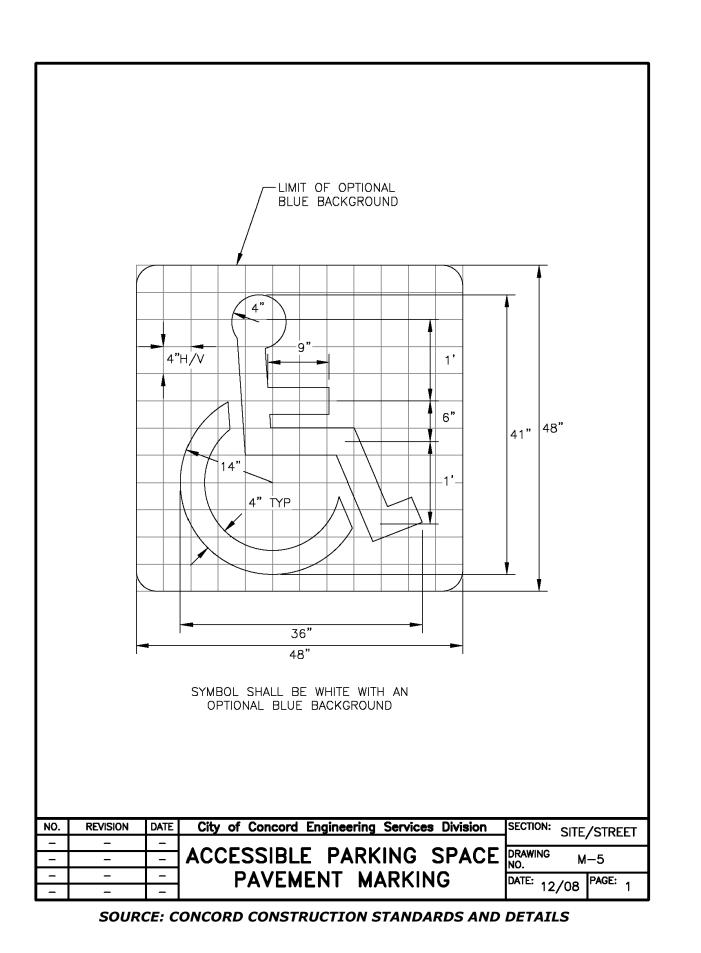
PROJ.: 23012

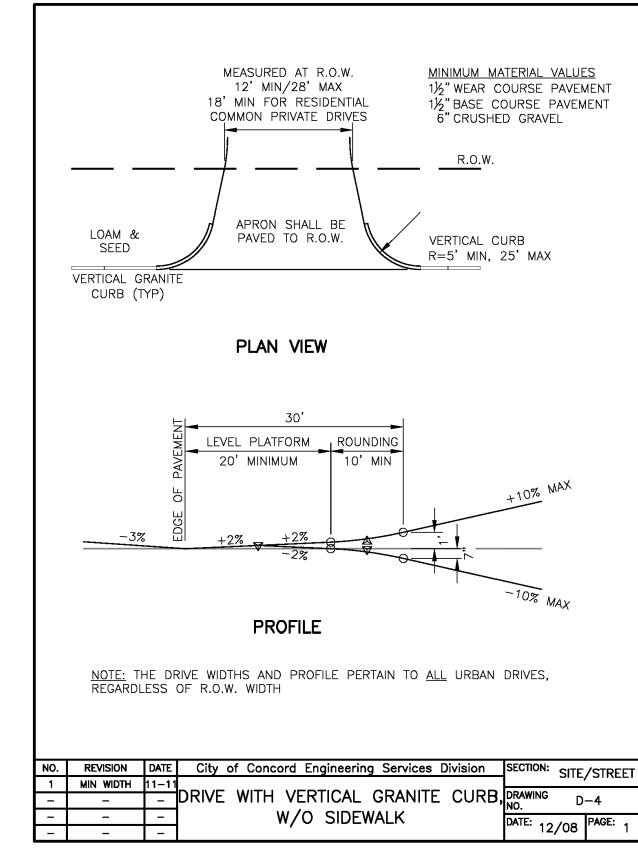
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SHEET: 12 OF 19

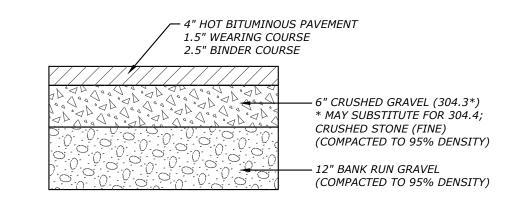




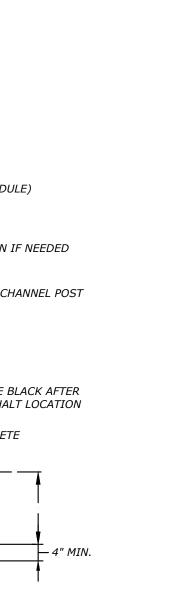


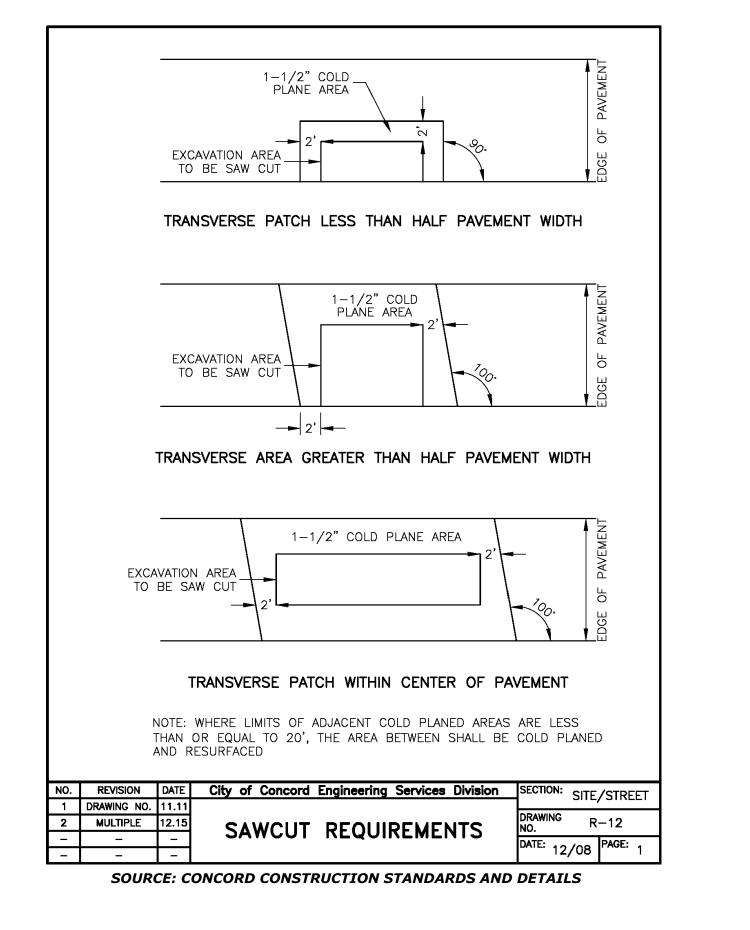


**SOURCE: CONCORD CONSTRUCTION STANDARDS AND DETAILS** 



STANDARD DUTY PAVEMENT DETAIL -NOT TO SCALE-





d/b/a CAPITAL CITY SUBARU MANCHESTER STREET CONCORD AUTO TIC, LLC 150 MANCHESTER STREET 300 TRADE CTR. - SUITE 7700 WORBURN, MA 01801-7419 CONCORD, NH 03301 **REVISIONS:** OF NEW HAMP **DESCRIPTION** AARON \ THIBEAULT No.18093 DATE: FEB. 2025

CONSTRUCTION DETAILS

PREPARED FOR:

CAPITAL CITY SUBARU

150 MANCHESTER STREET (ML 783Z-16)

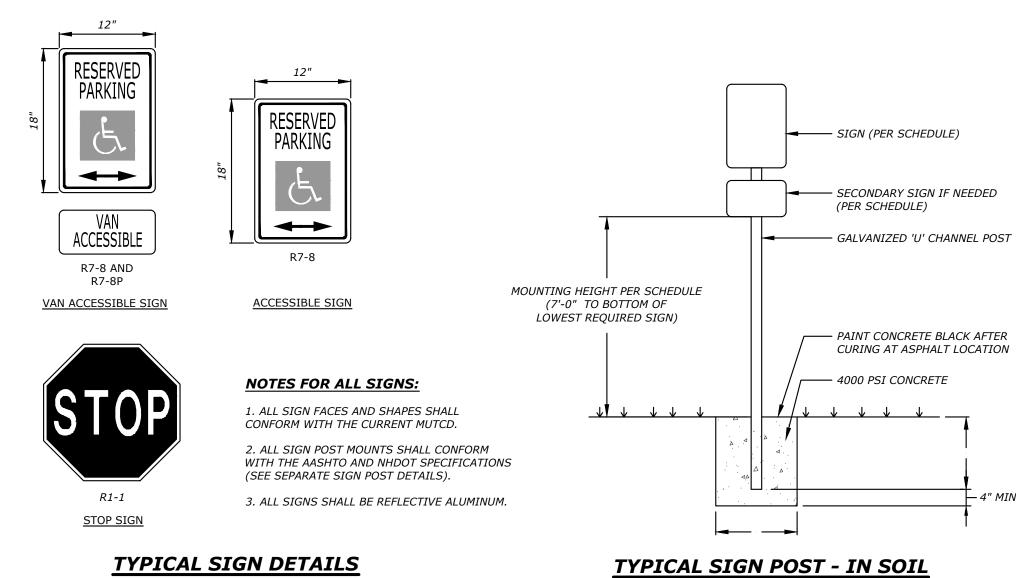
CONCORD, NH

WCK CONCORD-SB, LLC

**APPLICANT** 

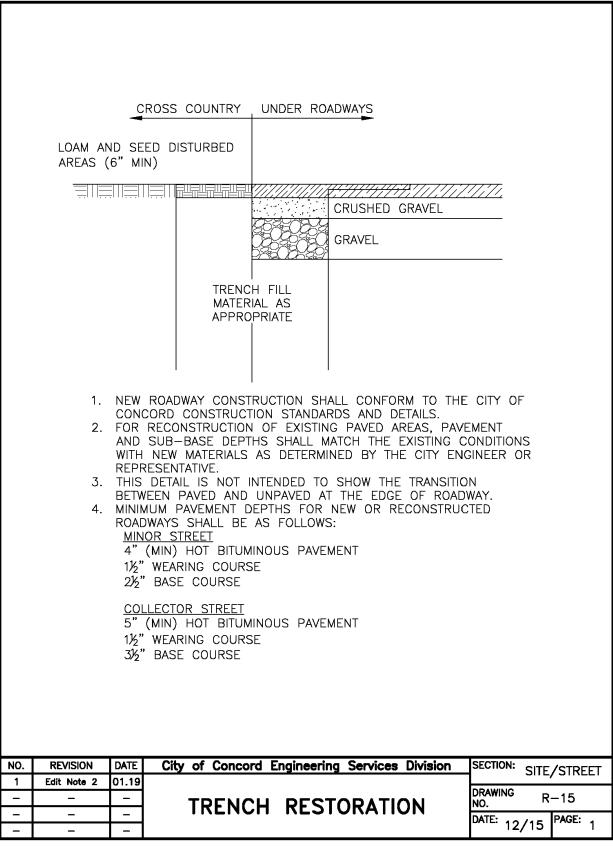
119 Storrs St, Ste 201 Concord, NH 03301 Tel 603-226-1166 Fax 603-226-1160 PROJ.: 23012 SCALE: AS SHOWN SHEET: 13 OF 19

OWNER MANCHESTER STREET CONCORD AUTO, LLC &

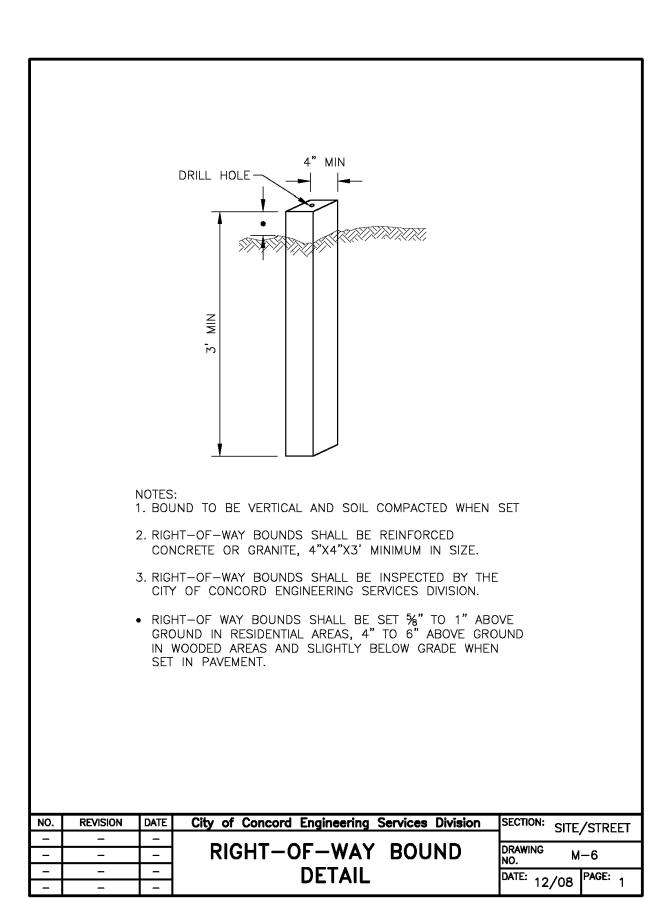


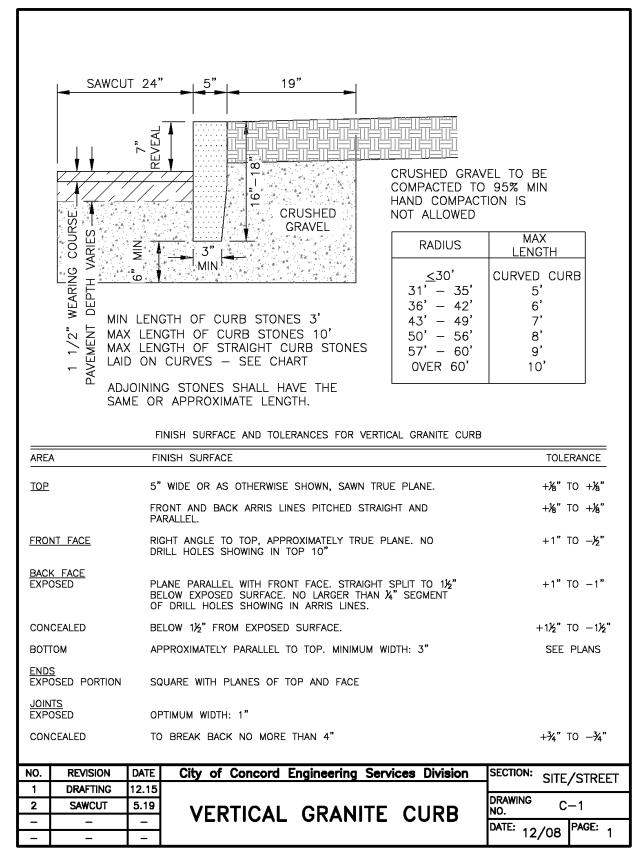
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-NOT TO SCALE-

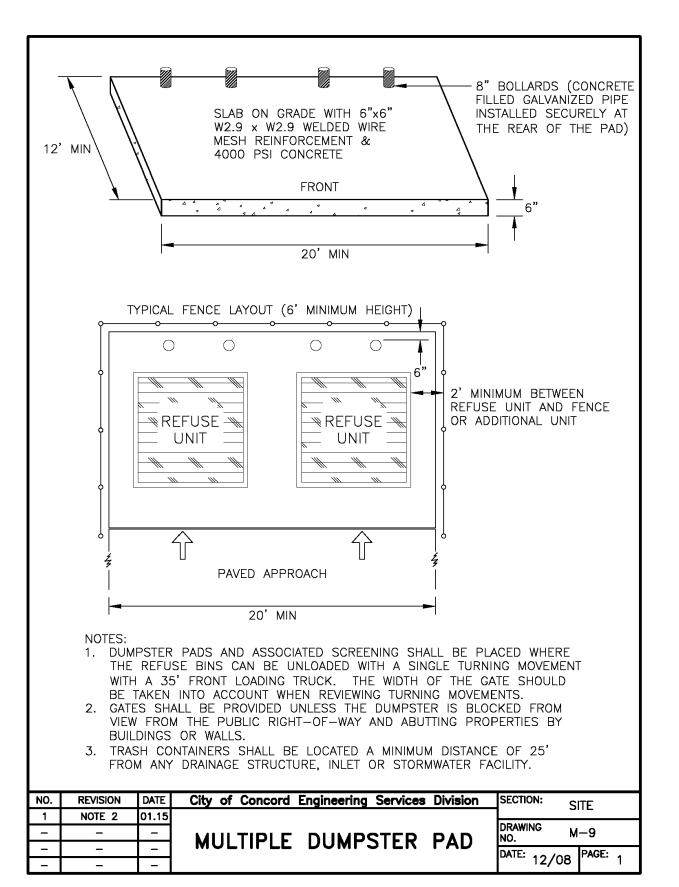


SOURCE: CONCORD CONSTRUCTION STANDARDS AND DETAILS

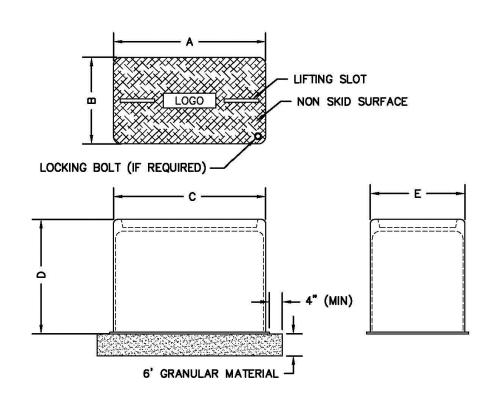


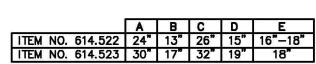


SOURCE: CONCORD CONSTRUCTION STANDARDS AND DETAILS



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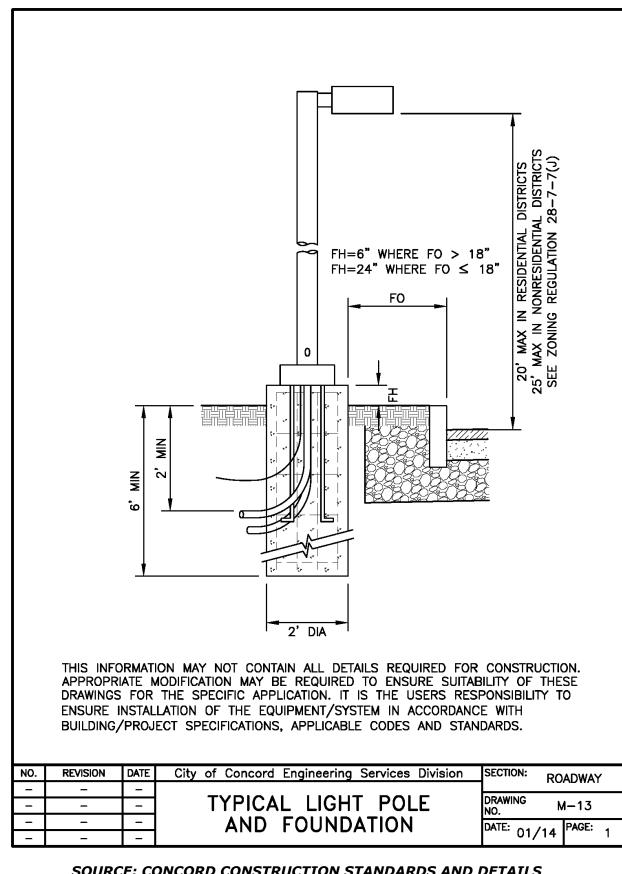


### NOTES

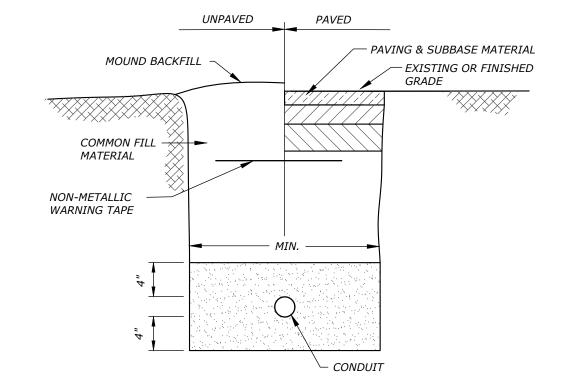
1. PULL BOX SHALL HAVE AN OPEN BOTTOM

2. LOGO= SIGNAL DRAIN OR ELECTRIC AS REQUIRED.

MOLDED PULL BOX DETAIL -NOT TO SCALE-







# **SITE LIGHTING TRENCH SECTION (TYP.)**

# CONSTRUCTION DETAILS

PREPARED FOR:

## CAPITAL CITY SUBARU

150 MANCHESTER STREET (ML 783Z-16) CONCORD, NH

REVISIONS:  NO. DATE DESCRIPTION  NO.18093  CENSONAL EMILIARY OF THE PROPERTY	



WCK CONCORD-SB, LLC

d/b/a CAPITAL CITY SUBARU

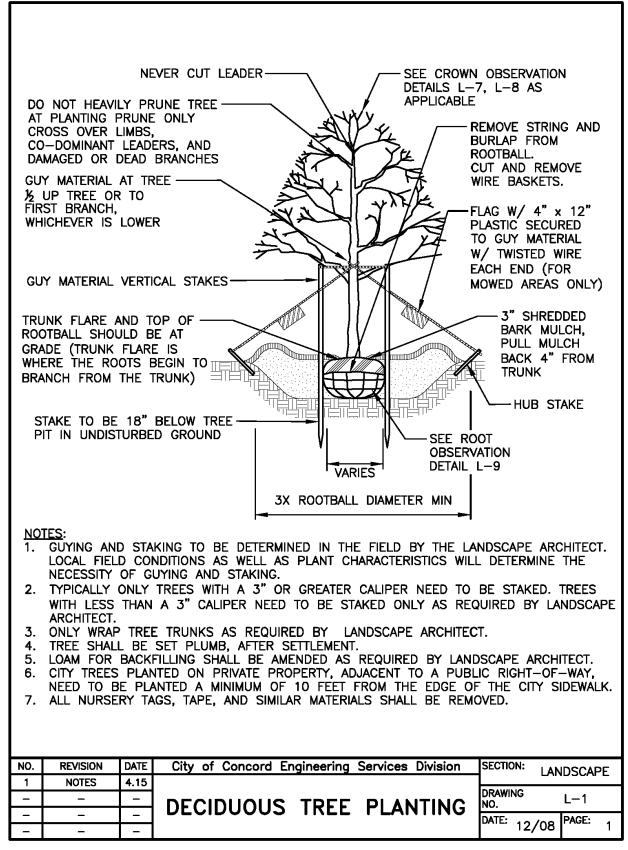
APPLICANT

OWNER MANCHESTER STREET CONCORD AUTO, LLC &

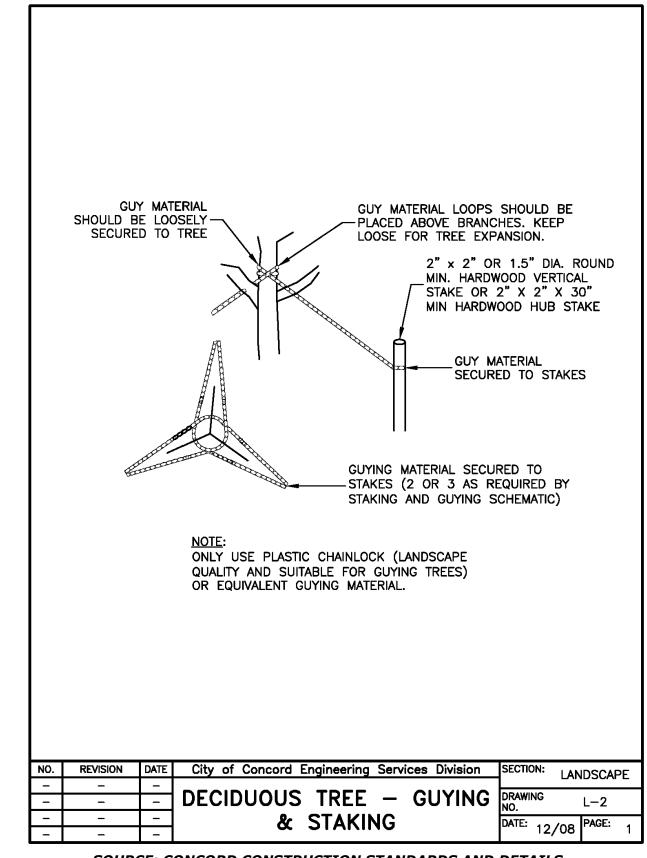
MANCHESTER STREET CONCORD AUTO TIC, LLC

DATE: FEB. 2025 PROJ.: 23012 SCALE: AS SHOWN SHEET: 14 OF 19

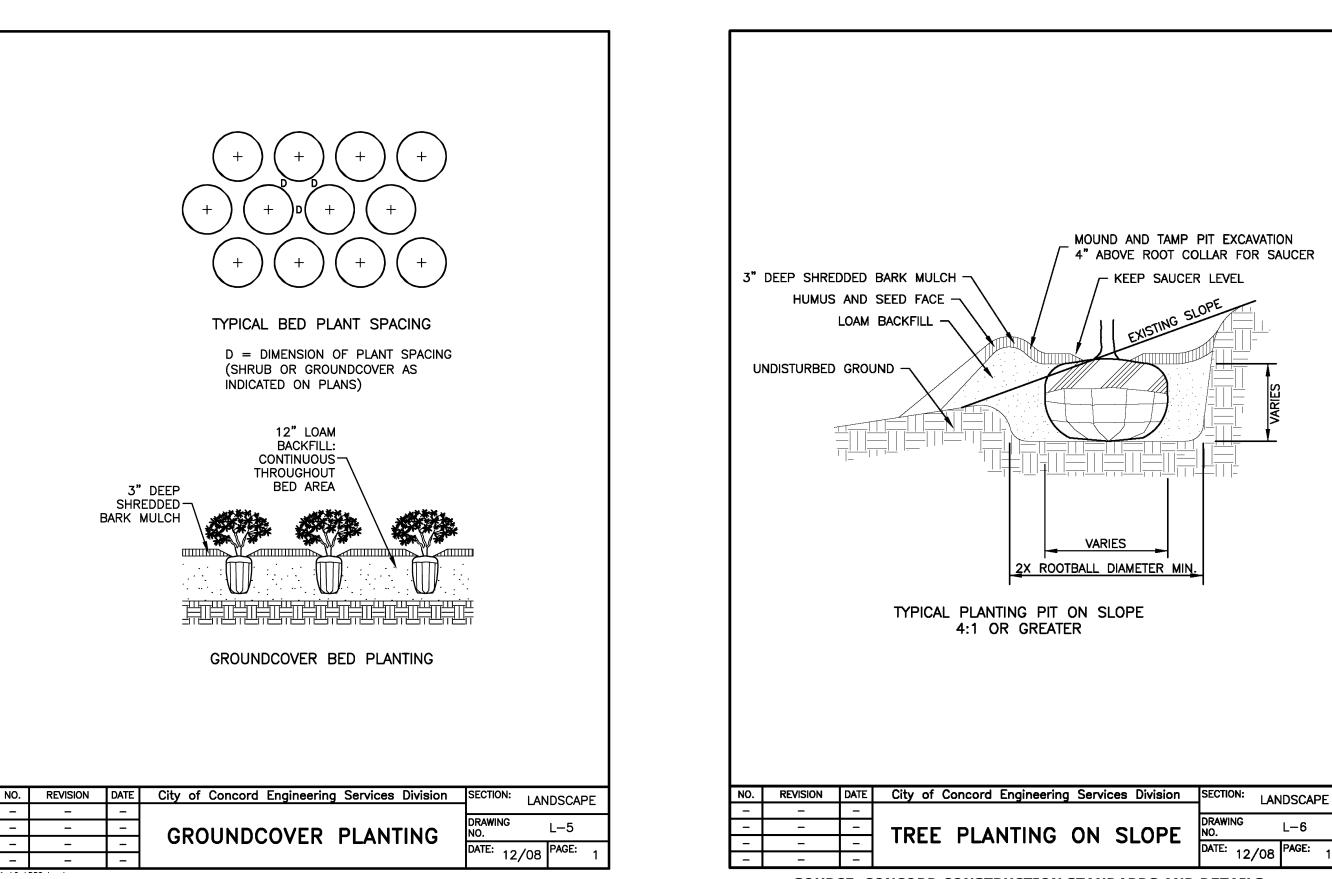
SOURCE: CONCORD CONSTRUCTION STANDARDS AND DETAILS



SOURCE: CONCORD CONSTRUCTION STANDARDS AND DETAILS



SOURCE: CONCORD CONSTRUCTION STANDARDS AND DETAILS

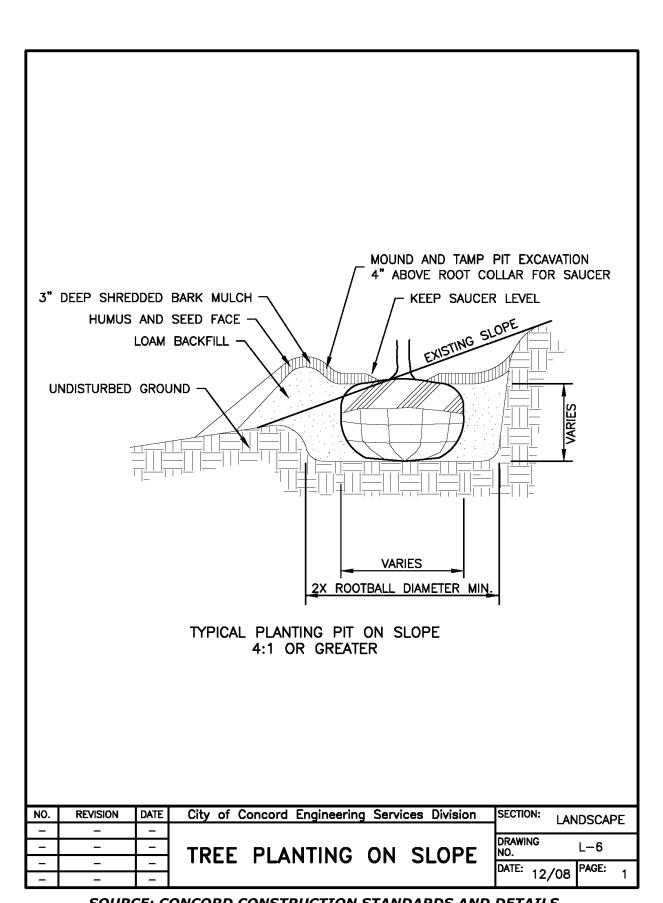


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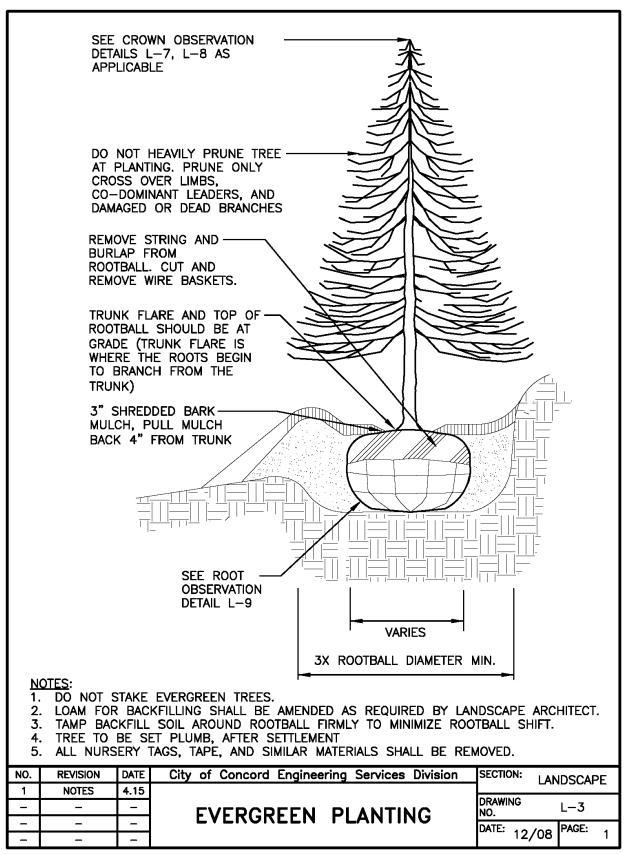
INDICATED ON PLANS)

12" LOAM

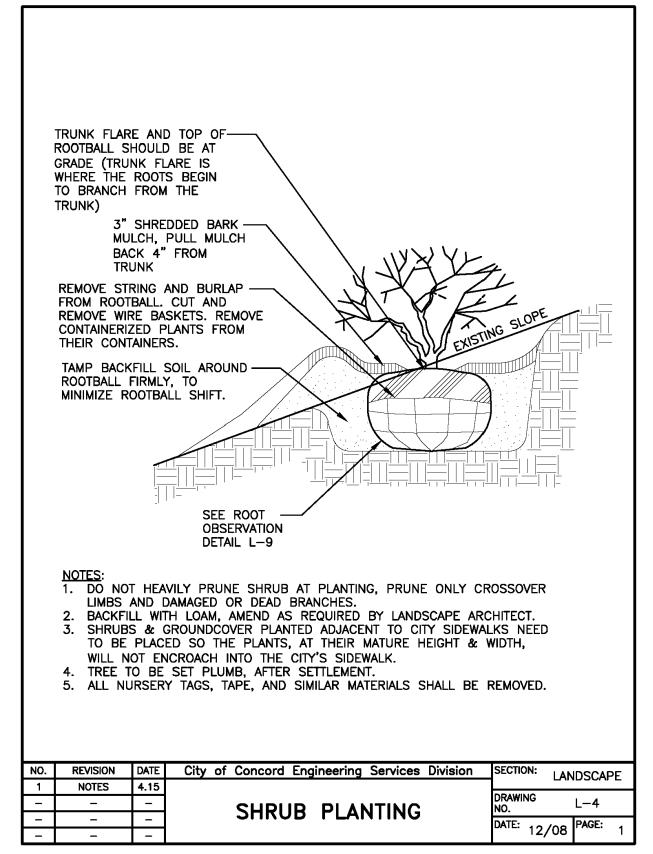
BACKFILL: CONTINUOUS-THROUGHOUT



SOURCE: CONCORD CONSTRUCTION STANDARDS AND DETAILS



SOURCE: CONCORD CONSTRUCTION STANDARDS AND DETAILS



SOURCE: CONCORD CONSTRUCTION STANDARDS AND DETAILS

## **CONSTRUCTION DETAILS**

PREPARED FOR:

# CAPITAL CITY SUBARU

150 MANCHESTER STREET (ML 783Z-16) CONCORD, NH

AARON S. THIBEAULT No. 18093

**APPLICANT** 

OWNER MANCHESTER STREET CONCORD AUTO, LLC & MANCHESTER STREET CONCORD AUTO TIC, LLC 300 TRADE CTR. - SUITE 7700 WORBURN, MA 01801-7419

**REVISIONS: DESCRIPTION** 



WCK CONCORD-SB, LLC

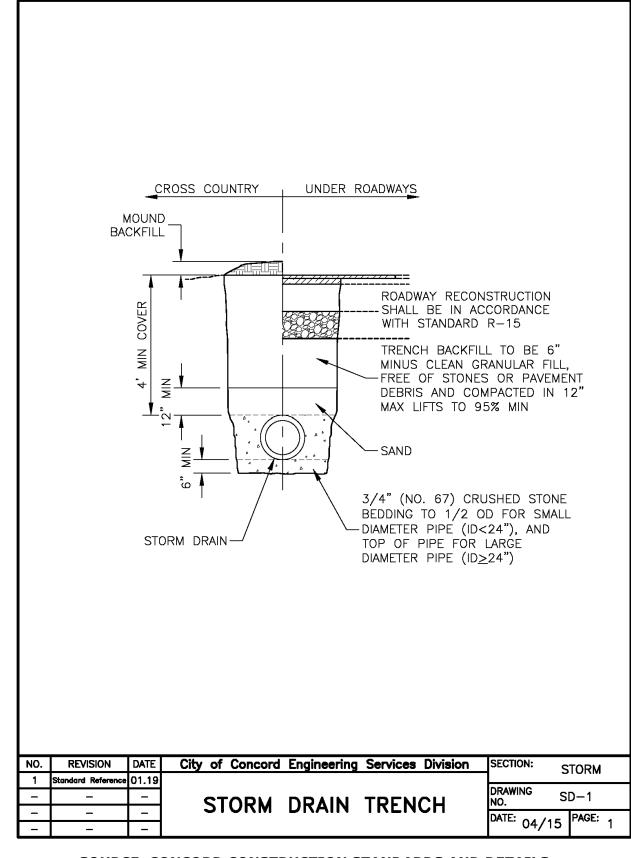
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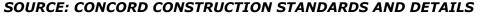
d/b/a CAPITAL CITY SUBARU

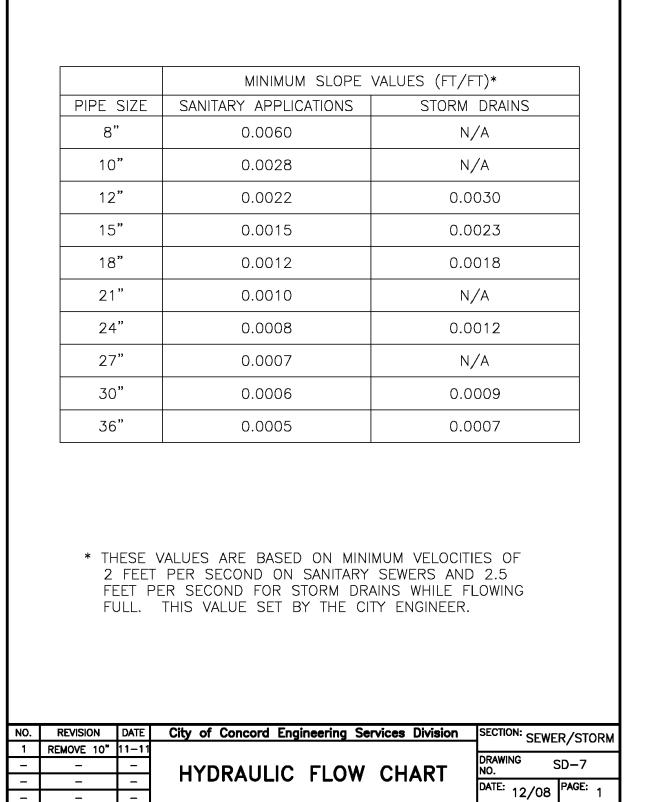
150 MANCHESTER STREET

Fax 603-226-1160

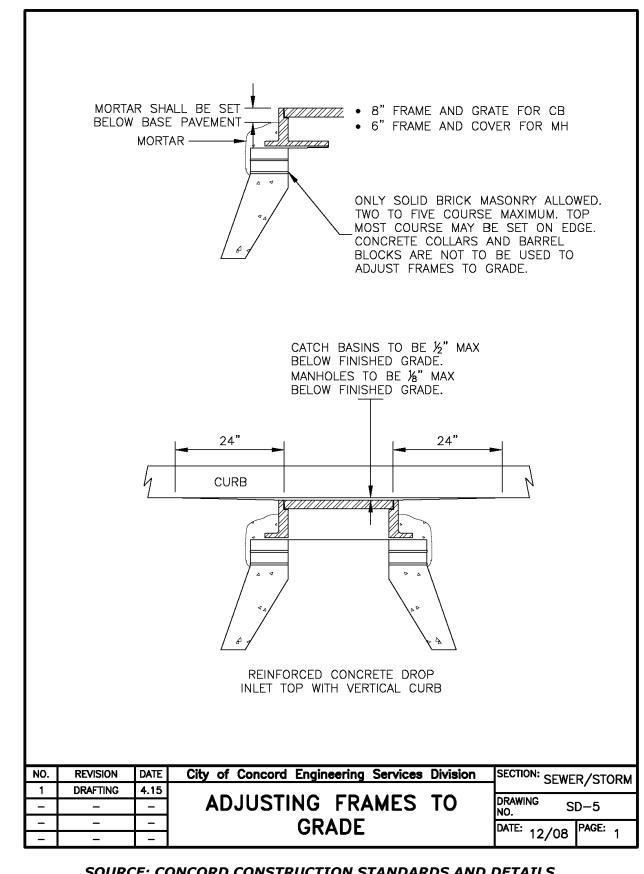
DATE: FEB. 2025 PROJ.: 23012 SCALE: AS SHOWN SHEET: 15 OF 19



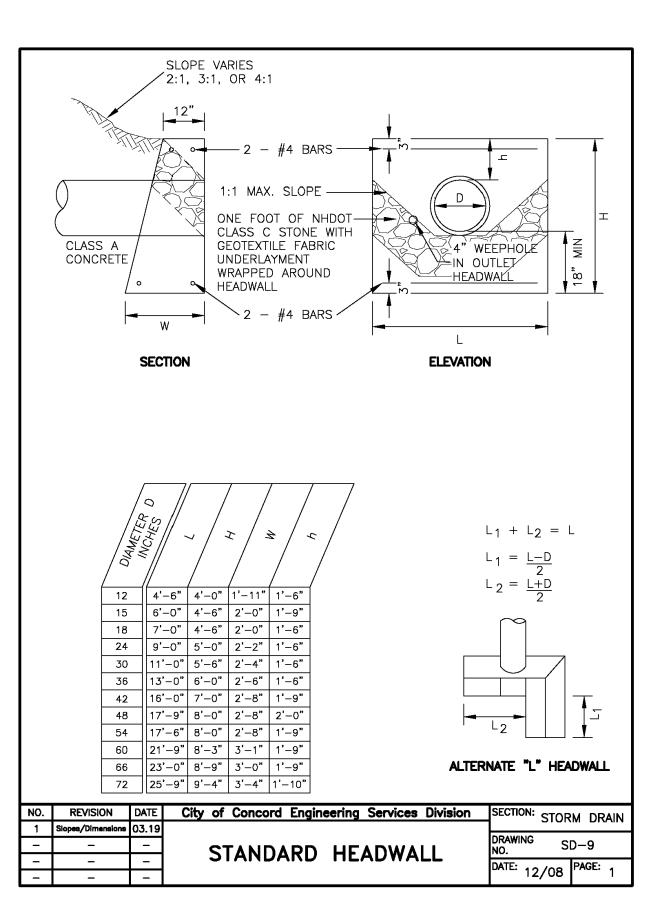




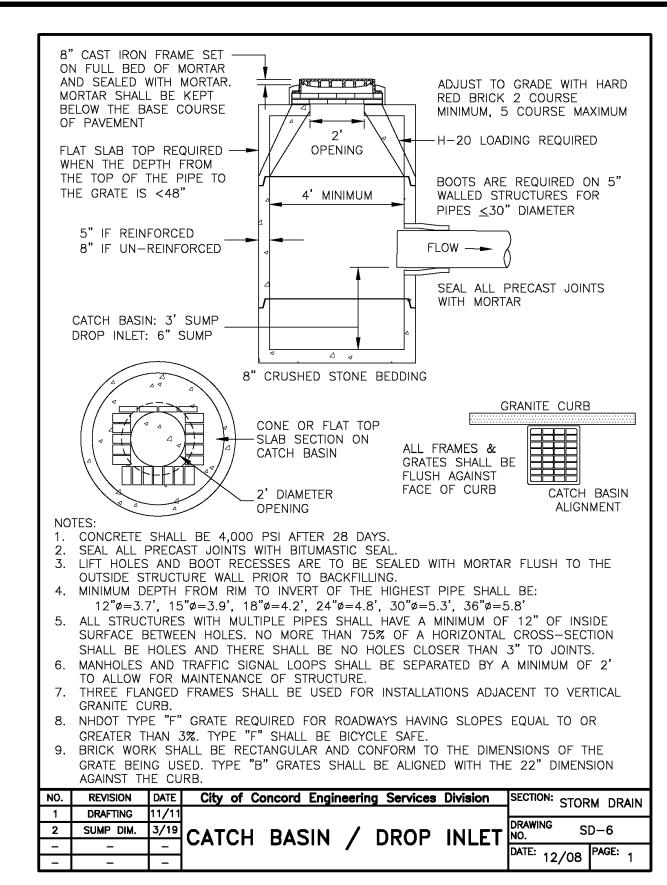
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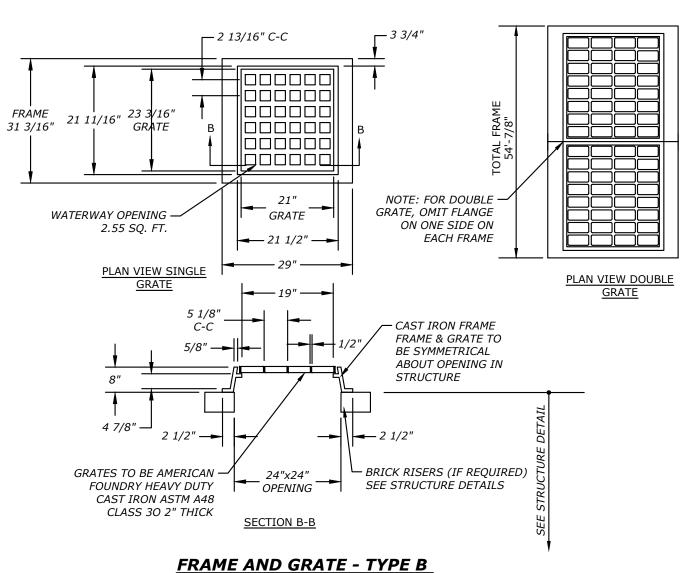
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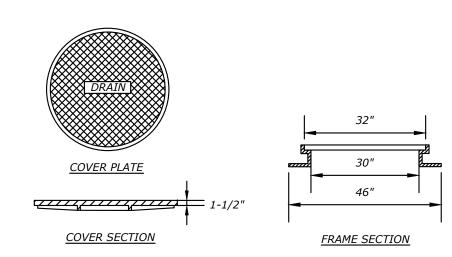
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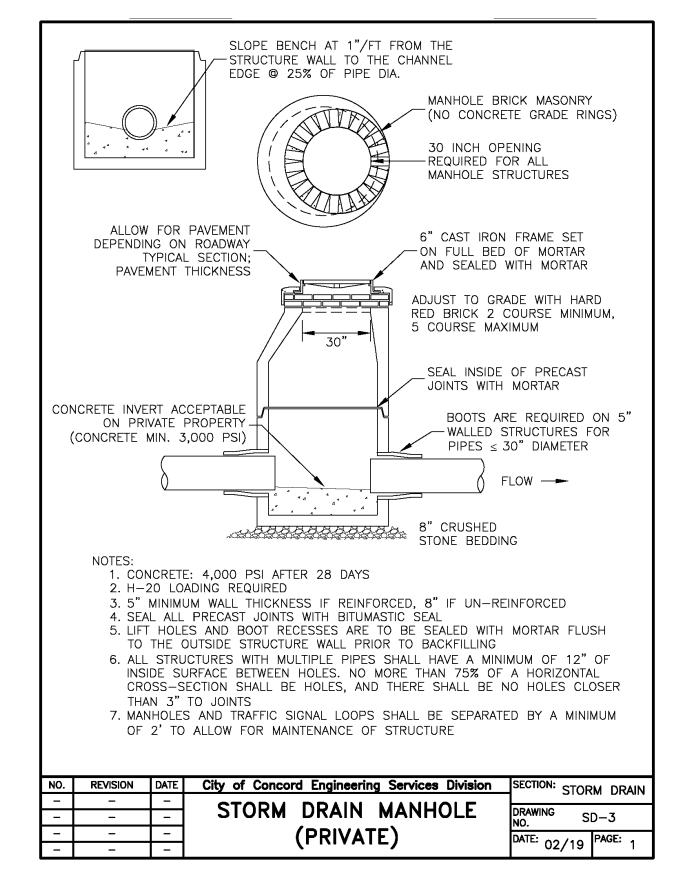
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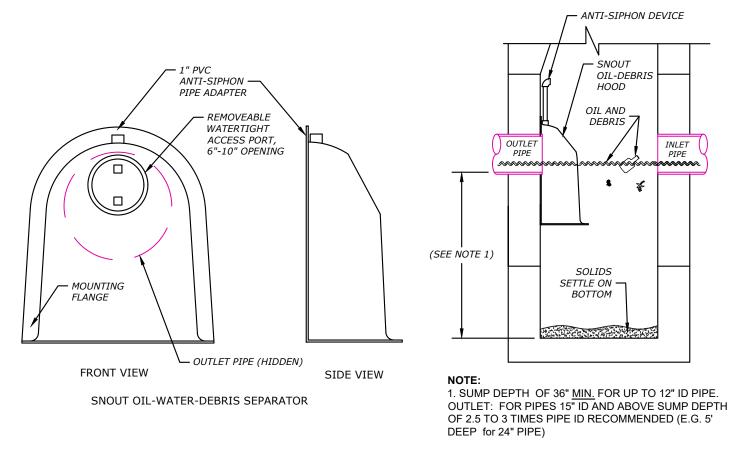
-NOT TO SCALE-



DRAIN MANHOLE FRAME & COVER DETAIL -NOT TO SCALE-







# TYPICAL SNOUT DETAIL

NOT TO SCALE

## **CONSTRUCTION DETAILS**

PREPARED FOR:

## CAPITAL CITY SUBARU

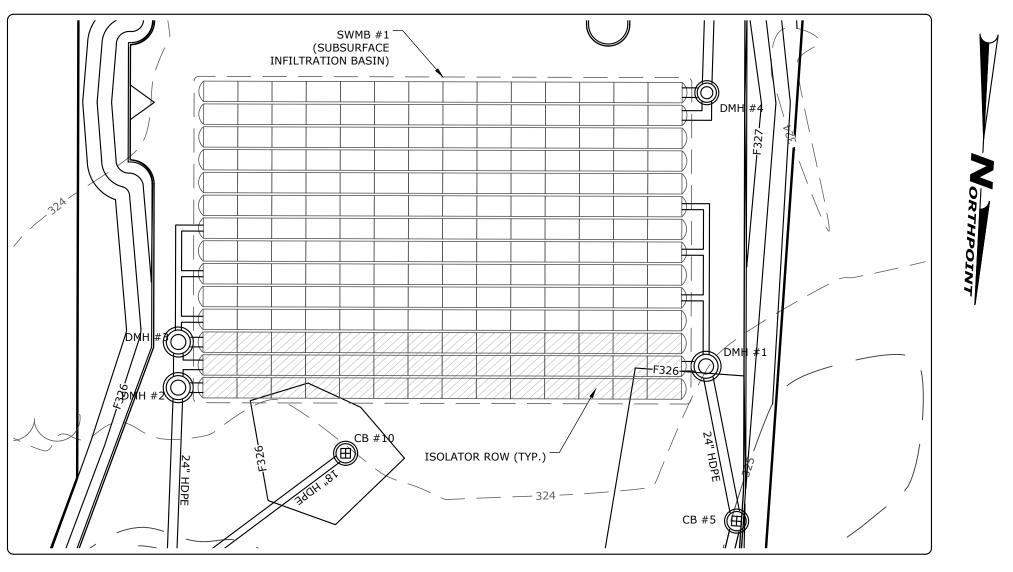
150 MANCHESTER STREET (ML 783Z-16) CONCORD, NH

d/b/a CAPI	ORD-SB, LLC STAL CITY SUBARU SESTER STREET NH 03301	OWNER MANCHESTER STREET CONCORD AUTO, LLC & MANCHESTER STREET CONCORD AUTO TIC, LLC 300 TRADE CTR SUITE 7700 WORBURN, MA 01801-7419
AARON S. THIBEAULT No.18093 ONAL ENGINEERING	REVISIONS:           NO.         DATE         DESCR.           —         —         —           —         —         —           —         —         —           —         —         —           —         —         —           —         —         —           —         —         —           —         —         —	RIPTION

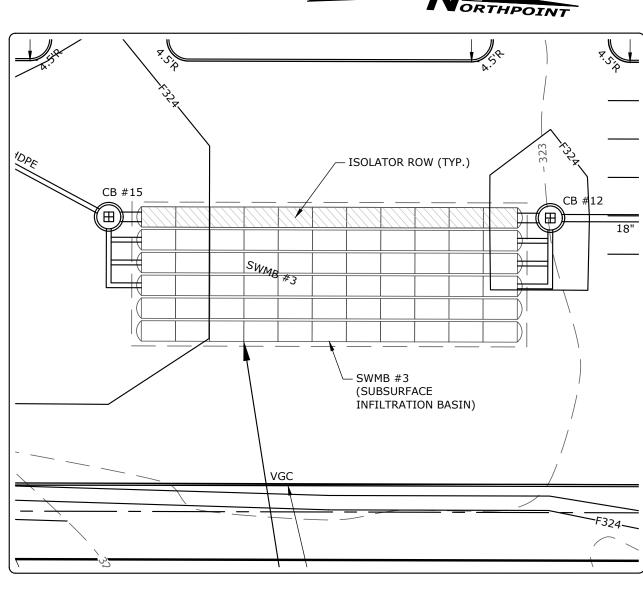


Tel 603-226-1166 Fax 603-226-1160

DATE: FEB. 2025 PROJ.: 23012 SCALE: AS SHOWN SHEET: 16 OF 19



CB #13 ISOLATOR ROW (TYP.) — — SWMB #2 (SUBSURFACE INFILTRATION BASIN)



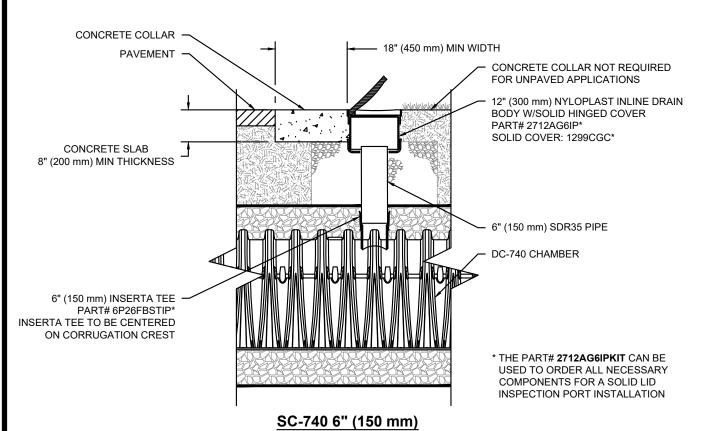
INSPECTION PORTS PER DETAIL

SWMB #3 PLAN DETAIL

SCALE: 1" = 20' SWMB #2 PLAN DETAIL

ADS 24" PREFABRICATED END CAP WITH "FLAMP" INV. ELEV = 318.00

SWMB #1 PLAN DETAIL



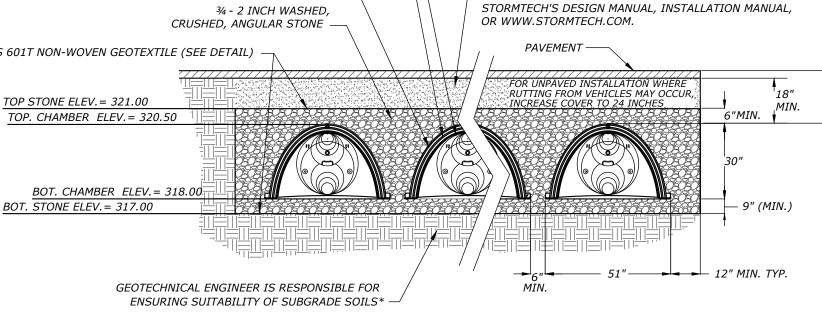
**INSPECTION PORT DETAIL** 

-NOT TO SCALE-

WITH SECTION 3 (AASHTO) AND SHALL INCLUDE H20 DESIGN TRUCK, — IMPACT FACTOR, MULTIPLE PRESENCE FACTOR, AND LANE LOAD. GRANULAR WELL GRADED SOIL/AGGREGATE MIXTURES, <35% FINES. COMPACT IN 6 IN LIFTS TO 95% PROCTOR DENSITY. SC-740 CHAMBER -SEE THE TABLE OF ACCEPTABLE FILL MATERIALS IN 34 - 2 INCH WASHED, CRUSHED, ANGULAR STONE -ADS 601T NON-WOVEN GEOTEXTILE (SEE DETAIL) TOP STONE ELEV. = 321.00

CHAMBERS SHALL MEET THE DESIGN REQUIREMENTS AND SAFETY FACTORS SPECIFIED IN SECTION 12.12 OF THE LATEST EDITION OF THE AASHTO LRFD BRIDGE DESIGN

SPECIFICATIONS. LOADS SHALL BE CALCULATED IN ACCORDANCE



ONE LAYER OF ADSPLUS625 WOVEN GEOTEXTILE BETWEEN FOUNDATION STONE AND CHAMBERS 5' (1.5 m) MIN WIDE CONTINUOUS FABRIC WITHOUT SEAMS

 $lackbox{n}$ 

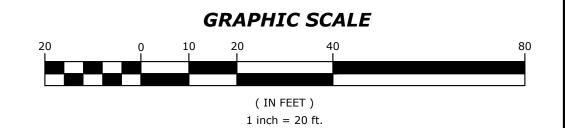
STORMTECH SC-740 CROSS-SECTION -NOT TO SCALE-

CATCH BASIN

MANHOLE

STORMTECH ISOLATOR ROW DETAIL





# **CONSTRUCTION DETAILS**

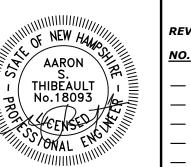
PREPARED FOR:

# CAPITAL CITY SUBARU

150 MANCHESTER STREET (ML 783Z-16) CONCORD, NH

150 MANCHEST CONCORD, NH (		EET
OF NEW HAMON S.  THIBEAULT No.18093  ONAL ENGINEERS	REVIS	SION: <u>DA</u>
S. THIBEAULT No.18093		
CENSED A		
MILL TOWAL ENGINEER	I —  -	

OWNER: MANCHESTER STREET CONCORD AUTO, LLC & MANCHESTER STREET CONCORD AUTO TIC, LLC 300 TRADE CTR. - SUITE 7700 WORBURN, MA 01801-7419



APPLICANT: WCK CONCORD-SB, LLC

d/b/a CAPITAL CITY SUBARU

VIS	SIONS:	
<u>-</u>	<u>DATE</u>	DESCRIPTION
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_		
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DATE: FEB. 2025 PROJ.: 23012 SCALE: 1"=20' SHEET: 17 OF 19

- 1. THE SMALLEST PRACTICAL AREA SHALL BE DISTRURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTRURBED AREAS ARE STABILIZED.
- 2. ALL PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS.
- 3. ALL AREAS OF UNSTABILIZED SOIL SHALL BE TEMPORARILY STABILIZED AS SOON AS PRACTICAL BUT NO LATER THAN 45 DAYS OF INITIAL DISTURBANCE.
- 4. TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH PROJECT PLANS. IN ADDITION, SIMILAR MEASURES SHALL BE INSTALLED WHERE AND WHEN THE FIELD CONDITION, OR FIELD OPERATION OF OF THE INDIVIDUAL SITE CONTRACTOR MAY WARRANT.
- 5. ALL TEMPORARY EROSION CONTROL MEASURES USED SHALL BE INSPECTED WEEKLY AND AFTER EVERY 0.5-INCH OR GREATER RAINFALL WITHIN A 24-HOUR PERIOD. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE CLEANED AND MAINTATINED AND OTHERWISE KEPT IN AN EFFECTIVE OPERATIONS MANNER THROUGHOUT THE CONSTRUCTION PERIOD.
- 6. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINSHED GRADE. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEEDED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- 7. ALL DISTURBED AREAS DESIGNATED TO BE TURF, SHALL RECEIVE A MINIMUM APPLICATION OF 4-INCHES OF LOAM (COMPACTED THICKNESS), PRIOR TO FINAL SEEDING AND MULCHING.
- 8. ALL SWALES AND DITCHLINES SHALL BE FULLY STABILIZED PRIOR TO HAVING STORMWATER DIRECTED TOWARDS
- 9.ALL SWALES AND DITCHLINES SHALL BE PERIODICALLY CLEANED OF DEPOSITED SEDIMENT SO AS TO MAINTAIN AN EFFECTIVE GRADE AND CROSS SECTION.
- 10. IN THE EVENT THAT DURING CONSTRUCTION OF ANY PORTION OF THIS PROJECT, A WINTER SHUTDOWN IS NECESSARY, THE CONTRACTOR SHALL STABILIZE ALL INCOMPLETE WORK AND PROVIDE FOR SUITABLE METHODS OF DIVERTING RUNOFF IN ORDER TO ELIMINATE SHEET FLOW ACROSS FROZEN SURFACES.
- 11. ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS
- 12. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- 13. AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON, BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH
- 14. DUST SHALL BE CONTROLLED BY THE USE OF WATER AS NECESSARY THROUGHOUT THE CONSTRUCTION PERIOD.
- 15. IN NO WAY ARE THOSE TEMPORARY EROSION CONTROL MEASURES INDICATED ON THESE PLANS TO BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL USE JUDGEMENT IN INSTALLING SUPPLEMENTARY EROSION CONTROL MEASURES WHERE AND WHEN SPECIFIC SITE CONDITIONS AND/OR CONSTRUCTION METHODOLOGIES MAY WARRANT.
- 16. AREAS HAVING FINISH GRADE SLOPES STEEPER THAN 3 : 1 SHALL BE STABILIZED WITH EROSION CONTROL MATS WHEN AND IF FIELD CONDITIONS WARRANT, OR IF SO ORDERED. EROSION CONTROL MATS SHALL BE INSTALLED TO CONFORM WITH THE RECOMMENDED BEST MANAGEMENT PRACTICE OUTLINED IN THE "STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE"
- 17. IN ORDER TO PROTECT WETLAND AREAS FROM SILTATION DURING CONSTRUCTION OF HOMES ON INDIVIDUAL LOTS, SILTATION FENCE SHALL BE INSTALLED UP GRADIENT OF DESIGNATED WETLANDS WHERE EXCAVATION IS PROPOSED TO OCCUR WITHIN 30-FEET OF SAID WETLANDS
- 18. ALL CONSTRUCTION WITHIN 100 FEET OF ANY WETLAND SHALL BE UNDERTAKEN WITH SPECIAL CARE TO AVOID EROSION AND SILTATION INTO THE WETLANDS.
- 19. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURED: - BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
  - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED; - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
- EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED. <u>CONSTRUCTION SEQUENCE</u>
- 1. CONTRACTOR TO NOTIFY DIG-SAFE 72-HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 2. CUT AND CLEAR TREES AND BRUSH ONLY WITHIN DESIGNATED LIMITS OF CLEARING AS NECESSARY TO FACILITATE PROPOSED CONSTRUCTION. ALL TREES, BRANCHES AND OTHER VEGETATIVE MATERIALS SHALL BE PROPERLY DISPOSED OF OFF SITE BY THE CONTRACTOR.
- 3. PRIOR TO COMMENCEMENT OF ANY GRUBBING OR FARTHMOVING OPERATIONS, ALL SPECIFIED PERIMETER CONTROLS AND STABILIZED CONSTRUCTION EXIT SHALL BE IN PLACE AS SHOWN ON THE PROJECT PLANS.
- 4. COMPLETE GRUBBING OPERATIONS, ALL STUMPS AND SIMILAR ORGANIC DEBRIS SHALL BE PROPERLY DISPOSED OF BY AREAS OUT OF THE WAY OF OTHER CONSTRUCTIONS ACTIVITIES AND DRAINAGE FLOW. STOCKPILES SHALL BE TEMPORARILY SEEDED WITH WINTER RYE AND BE SURROUNDED WITH HAY BALES AND/OR FABRIC SILTATION FENCE IN ORDER TO PREVENT LOSS DUE TO EROSION.
- 5. PRIOR TO ROUGH GRADING ANY PORTION OF THE SITE, THE PERMANENT RETENTION BASINS AND DRAINAGE SWALES SHALL BE INSTALLED FOR ANY PORTIONS OF THE SITE THAT WILL DIRECT RUNOFF TO THE BASINS OR SWALES.
- 6. BEGIN EARTHMOVING OPERATIONS: PERMANENT DOWNSLOPE WORK SHALL BE PROTECTED FROM UPGRADIENT STORMWATER FLOW BY THE CONSTRUCTION OF TEMPORARY EARTHEN DIKES OR EXCAVATED SWALES.
- 7. INSTALL DRAINAGE SWALE SYSTEMS, DETENTION BASINS AND OTHER UTILITIES WORKING FROM LOW TO HIGH. INCOMPLETE WORK SHALL BE PROTECTED FROM SILTATION BY THE USE OF SILTATION BARRIERS AROUND SWALES UNTIL THE SITE HAS BECOME FULLY STABILIZED.
- 8. CONSTRUCT TEMPORARY CULVERTS AS NECESSARY TO FACILITATE CONSTRUCTION ACTIVITIES. ALL SUCH CROSSINGS SHALL BE PROTECTED WITH HAY BALE BARRIERS TO LIMIT EROSION.
- 9. CONSTRUCT CLOSED DRAINAGE SYSTEM, AND OTHER SUBSURFACE UTILITIES, AS APPLICABLE.
- 10. COMMENCE CONSTRUCTION OF ROADWAYS. PERFORM EXCAVATION ACTIVITIES REQUIRED TO ACHIEVE SUBGRADE ELEVATION. ALL EXCAVATED EMBANKMENTS, DITCHES, SWALES AND ROADWAY CROSS CULVERTS SHALL BE INSTALLED AND STABILIZED. ALL SWALES AND DITCHLINES SHALL BE PROTECTED FROM EROSION BY IMPLEMENTATION OF SILT FENCES AND/OR EROSION CONTROL MULCH BERMS AS SHOWN ON THE PROJECT PLANS. DIVERT STORMWATER RUNOFF THROUGH THE USE OF TEMPORARY CULVERTS. OR OTHER MEANS NECESSARY PRIOR TO THE COMPLETIONS OF A FUNCTIONAL STORM DRAINAGE SYSTEM. SLOPES AND EMBANKMENTS SHALL BE STABILIZED BY TRACKING AND TEMPORARY SEEDING WITH WINTER RYE PRIOR TO TURF ESTABLISHMENT. ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO HAVING RUNOFF DIRECTED TO THEM.
- 11. COMPLETE CONSTRUCTION OF ROADWAY EMBANKMENTS BY ADDING APPROPRIATE BASE MATERIALS GRADED TO PROPER ELEVATION.
- 12. COMPLETE EXCAVATION /STABILIZATION GRADING ACTIVITIES. WHEN COMPLETE, IMMEDIATELY BEGIN TOPSOILING PROPOSED TURF AREAS USING STOCKPILED LOAM SUPPLEMENTED WITH BORROW LOAM, IF NECESSARY TO LEAVE A THICKNESS OF 4-INCHES OF FRIABLE LOAM.
- 13. APPLY TOPSOIL TO ROADWAY SLOPES AND OTHER AREAS DISTURBED BY CONSTRUCTION. TOPSOIL USED MAY BE NATIVE ORGANIC MATERIAL SCREENED SO AS TO BE FREE OF ROOTS, BRANCHES, STONES, AND OTHER DELETERIOUS MATERIALS. TOPSOIL SHALL BE APPLIED SO AS TO PROVIDE A MINIMUM OF A 4-INCH COMPACTED THICKNESS.
- 14. FINE GRADE ALL FUTURE TURF AREAS AND HYDROSEED WITH THE SPECIFIED SEED MIXTURE IMMEDIATELY AFTER FINE GRADING IS COMPLETED.
- 15. PERFORM FINE GRADING OF ROADWAY BASE MATERIALS. INSTALL THE BINDER COURSE OF PAVEMENT OVER ALL DESIGNATED AREAS.
- 16. INSTALL THE SPECIFIED WEARING COURSE OF PAVEMENT OVER THE BINDER COURSE. COMPLETE INSTALLATION OF LANDSCAPING, SIGNAGE AND OTHER SITE AMENITIES.
- 17. CONTINUE TO MONITOR AND RECTIFY MINOR SITE AND SLOPE EROSION UNTIL ENTIRE SITE APPEARS TO BE COMPLETELY STABILIZED AND VEGETATED WITH A HEALTHY STAND OF TURF OR GROUND COVER. MAINTAIN SPECIFIED SILTATION/EROSION CONTROL MEASURES THROUGH ONE WINTER.
- 18. AFTER STABILIZATION REMOVE AND SUITABLY DISPOSE OF TEMPORARY EROSION CONTROL MEASURES.
- 19. MONITOR CONSTRUCTION ACTIVITIES ON INDIVIDUAL LOTS TO INSURE CONSTRUCTION ACTIVITIES ARE BEING PERFORMED IN SUCH A WAY AS NOT TO ENDANGER THE INTEGRITY OF ROADWAY EMBANKMENTS, STORMWATER SYSTEMS AND UTILITIES. ALL DRIVEWAYS ACROSS DITCHLINES SHALL HAVE CULVERTS INSTALLED IN ACCORDANCE WITH LOCAL REQUIREMENTS.
- 20. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED FIVE (5) ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
- 21. THE PROJECT SHALL BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 38000 RELATIVE TO INVASIVE SPECIES.

SITE PREPARATION

- 1. GRADE AND SHAPE AREA OF INSTALLATION.
- P. REMOVE ALL ROCKS, CLODS, AND VEGETATIVE OR OTHER OBSTRUCTIONS SO THAT THE INSTALLED BLANKETS OR MATS WILL HAVE DIRECT CONTACT WITH THE SOIL.
- 3. PREPARE SEEDBED BY LOOSENING 2-3 INCHES OF TOPSOIL ABOVE FINAL GRADE, AND INCORPORATE AMENDMENTS, SUCH AS LIME AND FERTILIZER, INTO SOIL ACCORDING TO SOIL TEST AND THE SEEDING PLAN.
- 5. SEED AREA BEFORE BLANKET INSTALLATION FOR EROSION CONTROL AND RE-VEGETATION. SEEDING <u>AFTER</u> MAT INSTALLATION IS OFTEN SPECIFIED FOR TURF REINFORCEMENT APPLICATION.
- 1. WHEN APPLICABLE, ANCHORING SHOULD BE DONE PER MANUFACTURERS RECOMMEDATION.

5. LAY BLANKETS LOOSELY AND MAINTAIN DIRECT CONTACT WITH THE SOIL - DO NOT STRETCH.

2. U-SHAPED WIRE STAPLES, METAL GEOTEXTILE STAKE PINS, OR TRIANGULAR WOODEN STAKES CAN BE USED TO ANCHOR MATS TO THE GROUND SURFACE. WIRE STAPLES SHOULD BE A MINIMUM OF 11 GAUGE. METAL STAKE PINS SHOULD BE 3/16-INCH DIAMETER STEEL WITH A 1 ½-INCH STEEL WASHER AT THE HEAD OF THE PIN. WIRE STAPLES AND METAL STAKES SHOULD BE DRIVEN FLUSH TO THE SOIL SURFACE. ALL ANCHORS SHOULD BE 6-8 INCHES LONG AND HAVE SUFFICIENT GROUND PENETRATION TO RESIST PULLOUT. LONGER ANCHORS MAY BE REQUIRED FOR LOOSE SOILS.

- 1. BEGIN AT THE TOP OF THE SLOPE AND ANCHOR ITS BLANKET IN A 6-INCH DEEP X 6-INCH WIDE TRENCH. BACKFILL
- 2. UNROLL BLANKET DOWN SLOPE IN THE DIRECTION OF THE WATER FLOW. THE EDGES OF ADJACENT PARALLEL ROLLS MUST BE OVERLAPPED 4 INCHES AND BE STAPLED EVERY 3 FEET.
- 4. WHEN BLANKETS MUST BE SPLICED, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH 6-INCH OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12 INCHES APART.
- 6. BLANKETS SHALL BE STAPLED SUFFICIENTLY TO ANCHOR BLANKET AND MAINTAIN CONTACT WITH THE SOIL. STAPLES SHALL BE PLACED DOWN THE CENTER AND STAGGERED WITH THE STAPLES PLACED ALONG THE EDGES. STEEP SLOPES, 1:1 TO 2:1, REQUIRE 2 STAPLES PER SQUARE YARD. MODERATE SLOPES, 2:1 TO 3:1, REQUIRE 1-2 STAPLES PER SQUARE YARD (1 STAPLE 3' O/C). GENTLE SLOPES REQUIRE 1 STAPLE PER SQUARE YARD.

#### INSTALLATION IN CHANNELS

- 1. DIG INITIAL ANCHOR TRENCH 12 INCHES DEEP AND 6 INCHES WIDE ACROSS THE CHANNEL AT THE LOWER END OF THE
- 2. EXCAVATE INTERMITTENT CHECK SLOTS, 6 INCHES DEEP AND 6 INCHES  $\,$  WIDE ACROSS THE CHANNEL AT 25-30 FOOT INTERVALS ALONG THE CHANNEL.
- 3. CUT LONGITUDINAL CHANNEL ANCHOR SLOTS 4 INCHES DEEP AND 4 INCHES WIDE ALONG EACH SIDE OF THE INSTALLATION TO BURY EDGES OF MATTING. WHENEVER POSSIBLE EXTEND MATTING 2-3 INCHES ABOVE THE CREST OF 4. BEGINNING AT THE DOWNSTREAM END AND IN THE CENTER OF THE CHANNEL, PLACE THE INITIAL END OF THE FIRST ROLL IN THE ANCHOR TRENCH AND SECURE WITH FASTENING DEVICES AT 1-FOOT INTERVALS. NOTE: MATTING WILL
- 5. IN THE SAME MANNER, POSITION ADJACENT ROLLS IN ANCHOR TRENCH, OVERLAPPING THE PRECEDING ROLL A MINIMUM OF 3 INCHES. SECURE THESE ENDS OF MATS WITH ANCHORS AT 1-FOOT INTERVALS, BACKFILL AND COMPACT
- 7. UNROLL CENTER STRIP OF MATTING UPSTREAM. STOP AT NEXT CHECK SLOT OR TERMINAL ANCHOR TRENCH. UNROLL ADJACENT MATS UPSTREAM IN SIMILAR FASHION, MAINTAINING A 3-INCH OVERLAP.
- ). FOLD AND SECURE ALL ROLLS OF MATTING SNUGLY INTO ALL TRANSVERSE CHECK SLOTS. LAY MAT IN THE BOTTOM OF THE SLOT THEN FOLD BACK AGAINST ITSELF. ANCHOR THROUGH BOTH LAYERS OF MAT AT 12-INCH INTERVALS, THEN BACKFILL AND COMPACT SOIL. CONTINUE ROLLING ALL MAT WIDTHS UPSTREAM TO THE NEXT CHECK SLOT OR TERMINAL

#### INSPECTION AND MAINTENANCE

CENTER

DIRECTED.

VEGETATION.

AROUND THE DAM.

SECTION A-A

SECTION B-B

CONSTRUCTION REQUIREMENTS

DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.

4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND

STONE CHECK DAM DETAILS

SOURCE: CONCORD CONSTRUCTION STANDARDS AND DETAILS

3. EXTEND THE STONE TO A POINT BEYOND THE DITCH BANKS TO PREVENT CUTTING

REMOVED, STABILIZE ANY SEDIMENT WHICH IS PERMITTED TO STAY IN PLACE WITH

5. REMOVE STONE, AS DIRECTED, WHEN NO LONGER NEEDED. AFTER BARRIER IS

NO. REVISION DATE City of Concord Engineering Services Division SECTION:

EROSION WITH STONE OR LINER AS NEEDED OR DIRECTED.

INITIALLY BE UPSIDE DOWN IN ANCHOR TRENCH.

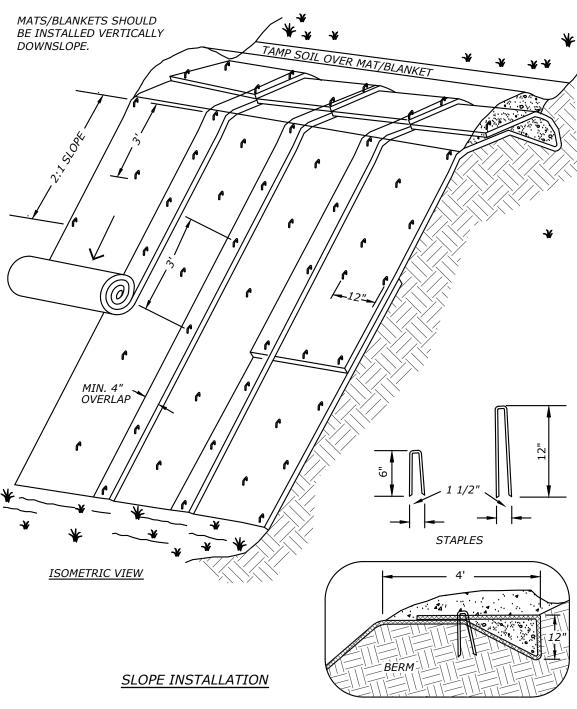
- 1. ALL BLANKET AND MATS SHOULD BE INSPECTED PERIODICALLY FOLLOWING INSTALLATION.
- 2. INSPECT INSTALLATION AFTER SIGNIFICANT RAINSTORMS TO CHECK FOR EROSION AND UNDERMINING. ANY FAILURE

L = THE DISTANCE SUCH THAT POINTS

24" MAX AT

X AND Y ARE OF EQUAL ELEVATION

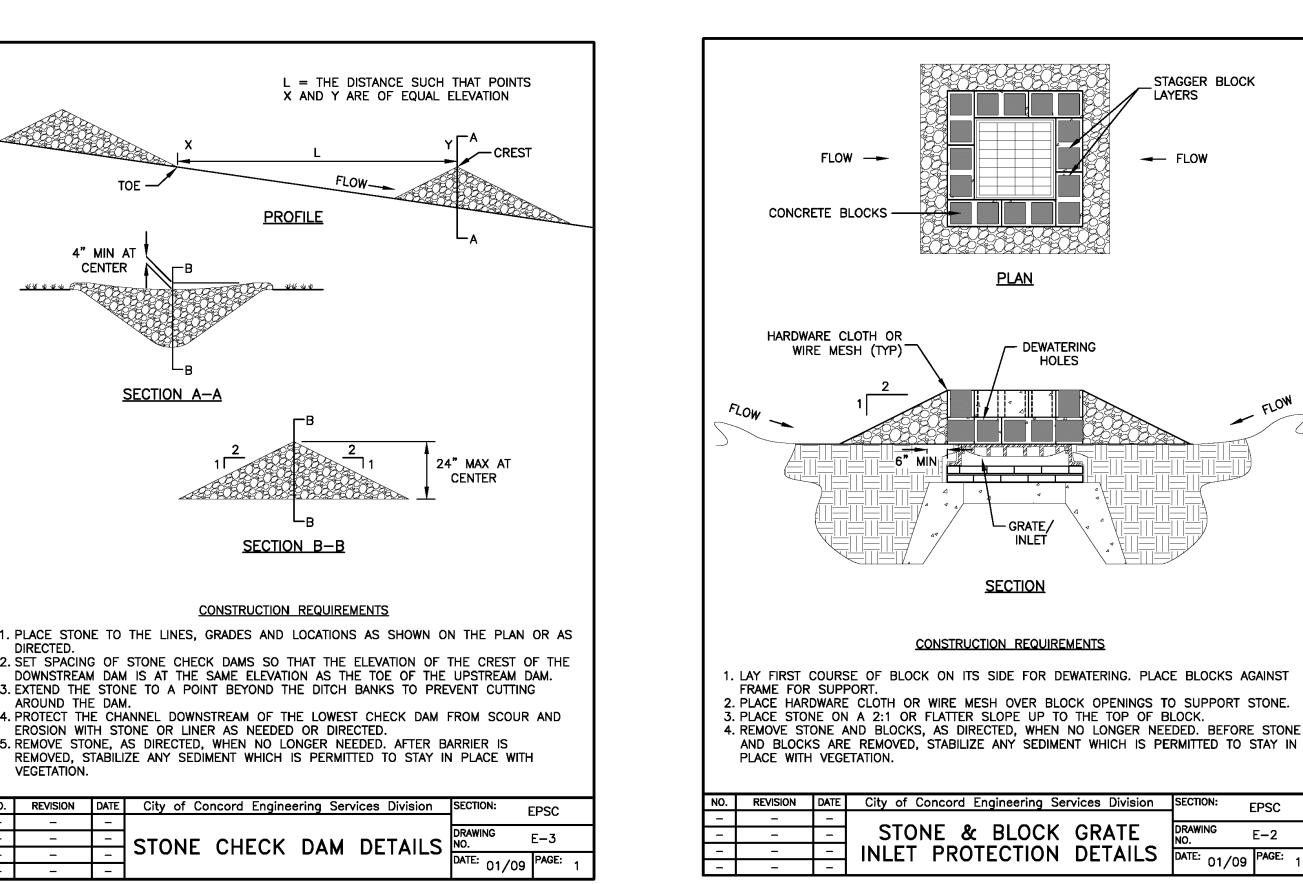
3. IF WASHOUT OR BREAKAGE OCCURS, RE-INSTALL THE MATERIAL AFTER REPAIRING THE DAMAGE TO THE SLOPE OR



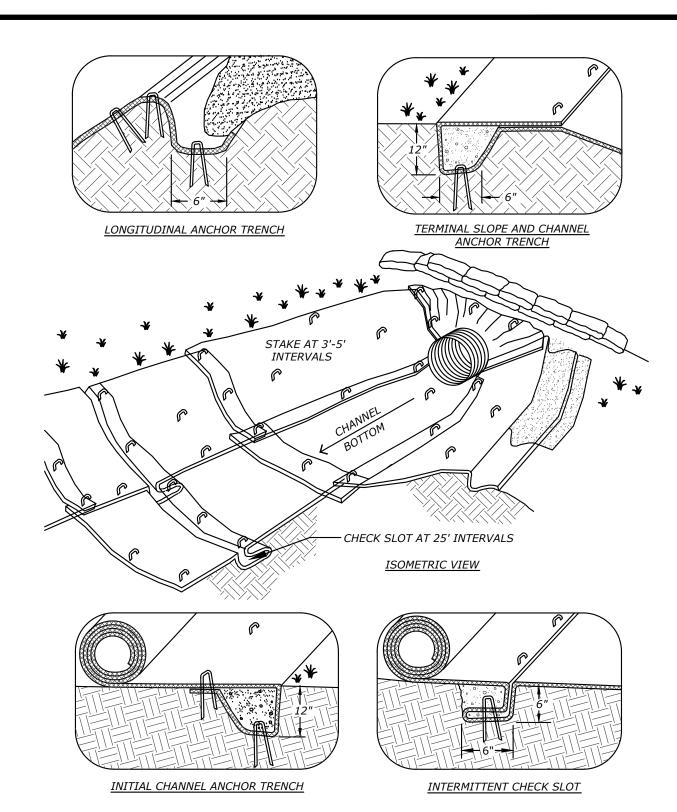
#### **DESCRIPTION**

EROSION CONTROL MATS ARE MANUFACTURED COMBINATIONS OF MULCH AND NETTING DESIGNED TO RETAIN SOIL MOISTURE AND MODIFY SOIL TEMPERATURE. THEY ARE TYPICALLY MADE FROM JUTE MATTING, STRAW, COCONUT FIBER, EXCELSIOR OR SYNTHETIC MATERIAL THAT IS ENVELOPED IN PLASTIC OR BIODEGRADABLE NETTING. EROSION BLANKETS ARE SUITED FOR POST-CONSTRUCTION SITE STABILIZATION, BUT MAY BE USED FOR TEMPORARY STABILIZATION OF HIGHLY EROSIVE SOILS.

# **EROSION CONTROL MATS**



SOURCE: CONCORD CONSTRUCTION STANDARDS AND DETAILS



CHANNEL INSTALLATION

# CONSTRUCTION DETAILS

PREPARED FOR:

# CAPITAL CITY SUBARU

150 MANCHESTER STREET (ML 783Z-16) CONCORD, NH WCK CONCORD-SB, LLC OWNER MANCHESTER STREET CONCORD AUTO, LLC &

AARON S. THIBEAULT No.18093  CENSS ONAL ENGINEERING
ONAL ENGINI

APPLICANT

**REVISIONS:** DESCRIPTION



d/b/a CAPITAL CITY SUBARU

150 MANCHESTER STREET

CONCORD, NH 03301

Tel 603-226-1166 Fax 603-226-1160

DATE: FEB. 2025 PROJ.: 23012 SCALE: AS SHOWN SHEET: 18 OF 19

MANCHESTER STREET CONCORD AUTO TIC, LLC

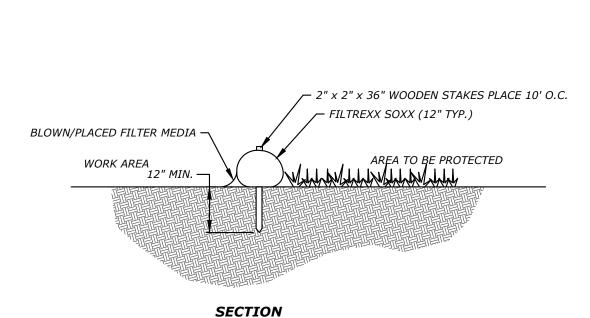
300 TRADE CTR. - SUITE 7700

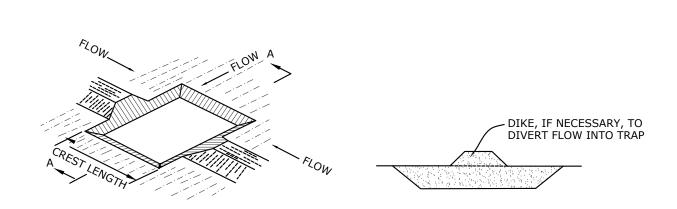
WORBURN, MA 01801-7419

SOURCE: CONCORD CONSTRUCTION STANDARDS AND DETAILS

CONSTRUCTION ENTRANCE

NO. REVISION DATE City of Concord Engineering Services Division SECTION:





E-1

DATE: 01/08 PAGE: 1

- 1. THE SEDIMENT TRAP SHALL BE INSTALLED AS CLOSE TO THE DISTURBED AREA OR SOURCE SEDIMENT AS POSSIBLE.
- 2. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE TRAP SHALL BE LESS THAN 5 ACRES.
- 3. THE MINIMUM VOLUME OF THE TRAP SHALL BE 3,600-CF OF STORAGE FOR EACH ACRE OF DRAINAGE.
- 4. THE SIDE SLOPES OF THE TRAP SHALL BE 3:1 OR FLATTER AND SHALL BE STABILIZED IMMEDIATELY AFTER THEIR CONSTRUCTION.

SECTION A-A

- 5. THE OUTLET OF THE TRAP SHALL BE A MINIMUM OF ONE FOOT BELOW THE CREST OF THE TRAP AN SHALL DISCHARGE TO A STABILIZED AREA.
- 6. THE TRAP SHALL BE CLEANED WHEN 50% OF THE ORIGINAL VOLUME IS FILLED.
- 7. THE MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND STABILIZED.
- 8. THE TRAP SHOULD BE CHECKED PERIODICALLY AND AFTER EVERY MAJOR STORM TO INSURE THAT IT IS WORKING PROPERLY AND IS NOT DAMAGED. DAMAGE TO THE TRAP SHOULD BE REPAIRED IMMEDIATELY.

9. WHEN THE DRAINAGE AREA FLOWING INTO THE BASIN HAS BEEN FULLY STABILIZED, THE SEDIMENT TRAP SHOULD BE REMOVED AND THE AREA VEGETATED USING APPROPRIATE MEASURES WITHIN 72 HOURS OF THE REMOVAL OF THE BASIN.

### EXCAVATED EARTH OUTLET SEDIMENT TRAP -NOT TO SCALE-

### <u>SEEDING SPECIFICATIONS:</u>

- 1. TEMPORARY SEEDING:
- A. TO ESTABLISH A QUICK VEGETATIVE COVER ON EXPOSED SOILS THAT ARE TEMPORARILY INACTIVE, APPLY WINTER RYE AT A RATE OF 50 POUNDS PER ACRE AND TOP DRESS WITH HAY MULCH OR STRAW AT A RATE OF 2 TONS PER ACRE.
- B. TO AID IN GERMINATION LIGHTLY RAKE SEED INTO SOIL TO ENSURE GOOD SEED/SOIL CONTACT PRIOR TO MULCHING. C. TO ANCHOR MULCH AND PREVENT DISPLACEMENT OF SEED, TRACK OVER NEWLY MULCHED AREA WITH TRACK VEHICLE
- 2. PERMANENT SEEDING:

TO CRIMP MULCH INTO THE SOIL.

SLOPES SHALL NOT BE STEEPER THAN 2:1; 3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.

SEEDBED PREPARATION

- A. AFTER FINAL SHAPING OF THE SLOPES IS ACHIEVED, APPLY A MINIMUM OF 4" OF TOPSOIL TO ALL EXPOSED SLOPES.
- B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

#### ESTABLISHING A STAND

- A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. THE TYPE AND AMOUNT OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL FERTILITY ANALYSIS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
- AGRICULTURAL LIMESTONE, 2 TONS PER ACRE OR 100 lbs. PER 1,000 sq.ft. NITROGEN (N), 50 lbs. PER ACRE OR 1.1 lbs. PER 1,000 sq.ft. PHOSPHATE (P2O5), 100 lbs. PER ACRE OR 2.2 lbs. PER 1,000 sq.ft. POTASH (K20), 100 lbs. PER ACRE OR 2.2 lbs. PER 1,000 sq.ft.
- (NOTE: THIS IS THE EQUIVALENT OF 500 lbs. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 lbs. PER ACRE OF 5-10-10.).
- B. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. THE PREFERRED PLANTING SEASON IS BETWEEN MAY 1 AND JUNE 15 OR SEPTEMBER 1 TO OCTOBER 15.

- A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING. B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE "BEST MANAGEMENT PRACTICE" FOR

#### MAINTENANCE TO ESTABLISH A STAND

- PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.
- SEED MIX: SEE SEED MIX TABLES FOR APPROPRIATE SEED MIX SPECIFICATION AND SEEDING RATES.

#### MULCH BERM (PERIMETER CONTROL)

#### **DESCRIPTION & PURPOSE**

- A MULCH BERM, OFTEN REFERRED TO AS A FILTER BERM OR AN EROSION CONTROL MIX BERM, IS A COMPOSITE OF PRIMARILY ORGANIC MATERIAL THAT CAN BE MANUFACTURED EITHER ON OR OFF THE PROJECT SITE. A MULCH BERM MAY CONSIST OF SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS.
- A MULCH BERM IS EFFECTIVE AS A SEDIMENT BARRIER INSTALLED ACROSS OR AT THE TOE OF A SLOPE TO INTERCEPT AND RETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED OR UNPROTECTED AREAS.

#### **COMPOSITION**

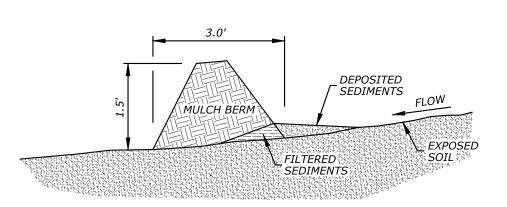
- 1. THE MULCH (OR EROSION CONTROL MIX) SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER. IT MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH. THE MIX COMPOSITION SHALL MEET THE FOLLOWING STANDARDS:
- 2. THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 80 AND 100%, DRY WEIGHT BASIS.
- 3. PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN AND A MINIMUM OF 70% MAXIMUM BY 85%, PASSING A 0.75"
- 4. THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.
- 5. LARGE PORTIONS OF SILT, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.
- 6. SOLUBLE SALTS CONTENT SHALL BE < 4.0 MMHOS/CM.

#### INSTALLATION

- 1. THE BERM MUST BE PLACED ALONG A RELATIVELY LEVEL CONTOUR. IT MAY BE NECESSARY TO CUT TALL GRASSES OR WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES THAT WOULD ENABLE FINES TO WASH UNDER THE BERM. 2. BERM MAY BE FORMED WITH A BARK BLOWER OR WITH OTHER EQUIPMENT. BERM SHALL BE A MINIMUM OF 3-FEET WIDE AT
- THE BASE AND SHALL BE AT LEAST 18-INCHES IN HEIGHT 3. BERM MAY BE PLACED DIRECTLY ON GROUND, NO TRENCHING OR STAKING IS REQUIRED.
- INSPECTION AND MAINTENANCE

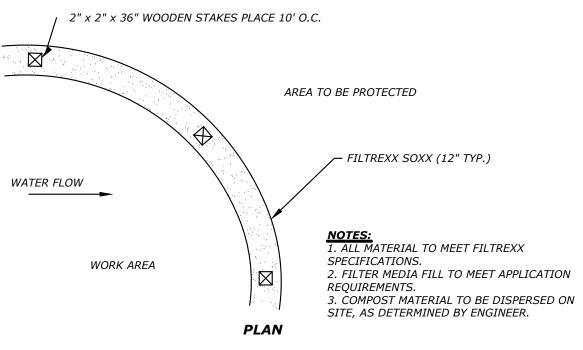
7. THE PH SHOULD BETWEEN 5.0 AND 8.0.

- 1. MULCH BERMS SHALL BE INSPECTED WEEKLY AND/OR AFTER EACH SIGNIFICANT RAINFALL, AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
- 2. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EACH STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH ONE-HALF THE HEIGHT OF THE BERM.
- 3. THE BERM SHALL BE RESHAPED AS NECESSARY.
- 4. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BERM IS REMOVED SHOULD BE GRADED TO CONFORM TO THE EXISTING TOPOGRAPHY AND RE-SEEDED.

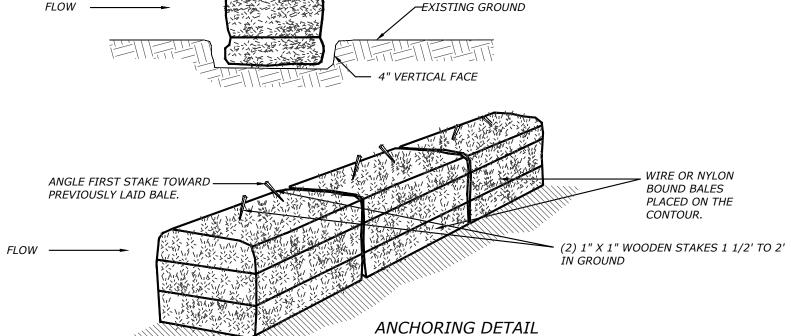


MULCH BERM CROSS-SECTION DETAIL

-NOT TO SCALE-



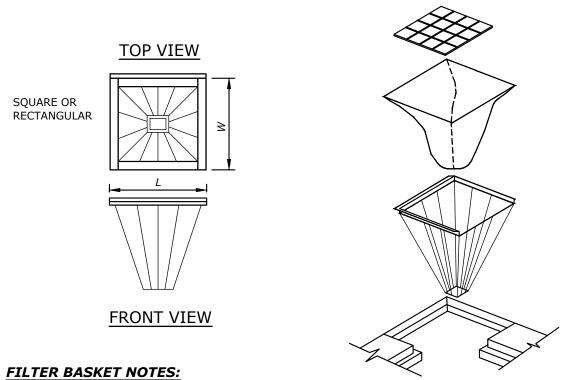
#### FILTREXX SEDIMENT CONTROL -NOT TO SCALE-



#### CONSTRUCTION SPECIFICATIONS

- 1) BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- 2) EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
- 3) BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
- 4) INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- 5) BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

### HAY BALE BARRIER -NOT TO SCALE-

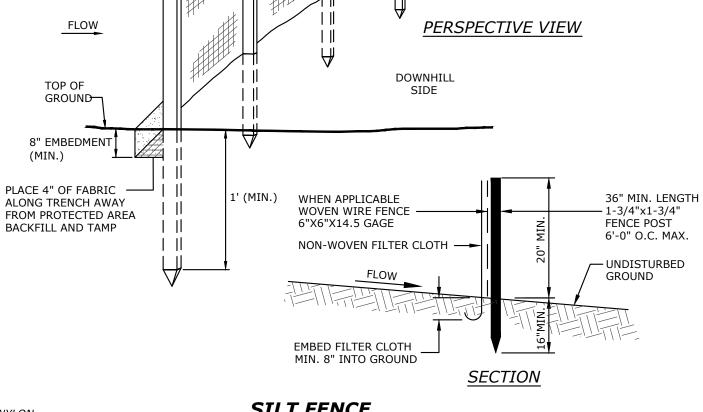


- 1. INLET BASKETS SHALL BE USED ON ALL CATCH BASINS DURING CONSTRUCTION. INLET BASKETS SHALL BE "METAL-ERA" OR APPROVED EQUAL. 2. FILTER FABRIC SHALL BE PUSHED DOWN AND FORMED TO THE SHAPE OF THE BASKET. THE SHEET OF FABRIC
- SHALL BE LARGE ENOUGH TO BE SUPPORTED BY THE BASKET FRAME WHEN HOLDING SEDIMENT AND EXTEND AT LEAST 6 INCHES PAST THE FRAME. THE INLET GRATE SHALL BE PLACED OVER THE BASKET/FRAME AND WILL SERVE AS THE FABRIC ANCHOR. 3. THE FILTER FABRIC SHALL BE A GEO-TEXTILE FABRIC: POLYESTER, POLYPROPYLENE, STABILIZED NYLON,
- POLYETHYLENE OR POLYVINYLIDENE CHLORIDE MEETING THE FOLLOWING SPECIFICATIONS:

GRAB STRENGTH: 45 lb. MINIMUM IN ANY PRINCIPAL DIRECTION (ASTM D1682). MULLEN BURST STRENGTH: MINIMUM 60 psi (ASTM D774).

- 4. THE FABRIC SHALL HAVE AN OPENING NO GREATER THAN A NUMBER 20 U.S. STANDARD SIEVE AND MINIMUM PERMEABILITY OF 120 gpm/sq. ft.
- 5. THE INLET BASKET SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING EXTENDED PERIODS OF PRECIPITATION. REPAIRS SHALL BE MADE IMMEDIATELY, AS NECESSARY, TO PREVENT PARTICLES FROM ENTERING THE DRAINAGE PIPING SYSTEM AND/OR CAUSING SURFACE FLOODING. 6. INLET BASKET SHALL BE MAINTAINED IN PLACE UNTIL ALL PAVING IS COMPLETED AND ALL UNPAVED AREAS HAVE BEEN STABILIZED WITH VEGETATION.

INLET FILTER BASKET -NOT TO SCALE-



1-3/4"x 1-3/4"x 4' WOOD STAKE

OR APPROVED EQUAL

SILT FENCE

- MIRAFI 100X OR

APPROVED EQUAL

#### SILT FENCE -NOT TO SCALE-

## CONSTRUCTION SPECIFICATIONS

- 1. THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
- 2. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
- 3. WHEN APPLICABLE, WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIE OR STAPLES. FILTER CLOTH SHALL BE FASTENED SECURELY TO THE WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, MID-SECTION, AND
- 4. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED.
- 5. FENCE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG AND DRIVEN A MINIMUM OF 16 INCHES INTO THE GROUND. WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES.

#### <u>MAINTENANCE</u>

WORK AREA

(MIN.)

- 1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
- 2. IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
- 3. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER.
- 4. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

# CONSTRUCTION DETAILS

PREPARED FOR:

# CAPITAL CITY SUBARU

150 MANCHESTER STREET (ML 783Z-16) CONCORD, NH

AARON S. THIBEAULT No.18093	HIIIIIII
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APPLICANT

**REVISIONS:** DESCRIPTION



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**DATE: FEB. 2025** PROJ.: 23012

SCALE: AS SHOWN Civil Engineering Land Planning Construction Services www.northpointeng.com SHEET: 19 OF 19