CORE STATES GROUP

April 22, 2020

Jillian M. Harris, AICP
Planner I
Planning Departement
1 Junkins Ave
Portsmouth, NH 03801

RE: Chase Bank -1574 Woodbury Ave
TAC Comments

Dear Ms. Harris,

We are in receipt of an Application Review prepared by your office, dated March 3th, 2020. The following are responses to the previously mentioned comment letter:

TAC Comments:

Comment 1 Existing utilities (water, fire suppression, storm drain, sewer, gas, power, communications) should all be reused. These will need to be shown in a more complete way on a plan of its own for clarity.

Response 1 **A proposed utility plan has been provided, see sheet C-4.**

Comment 2 If the fire service is not being used, it will need to be abandoned out in Woodbury Ave and the City will require milling and repaving of the area as the pavement in the road is new.

Response 2 **The proposed project will abandon the fire service at the main. A note has been provided on the demolition plan, see sheet C-1.**

Comment 3 The existing grease trap will need to be cleaned and then filled with sand.

Response 3 **A note has been added to ensure the grease trap is properly cleaned and filled per requirements, see sheet C-1.**

Comment 4 The parking stall at the end of a row of parking spaces should be made wider if possible to facilitate exiting the vehicle.

Response 4 **The parking and site layout have been revised to address these issues, see sheet C-2.**

Comment 5 How is stormwater being treated to remove pollutants?

Response 5 **The project intends to install a new water quality structure designated as a CDS Unit by Contech, which meets the state's requirements for 80% TSS removal rate. It will be installed within the existing storm conveyance system, refer to stormwater report for details.**

Comment 6 Please reduce hatching, it makes plan very difficult to read.

Response 6 **The hatching has been reduced on all sheets to be easier to read.**

Comment 7 Is there a lighting plan?

Response 7 **A lighting plan has been added, see sheet C-8 & C-9.**

Comment 8 Storm drainage and sewer pipes not being reused should be either removed or flow-filled.

Response 8 **The storm drainage an sewer pipes notes have been revised, see sheet C-1.**

Comment 9 The drive up ATM should have a full bypass lane for any vehicle that needs to get out of the queue. If a driver mistakenly enters the drive-thru they need to be able to bypass any queued vehicles.

Response 9 **The site layout has been revised to address the issues, see sheet C-2.**

Comment 10 Parking lot aisles with more than 7 spaces should not be dead-ended. Drivers are not able to see if a space is empty or whether it is occupied by a smaller vehicle. Perhaps an outlet can be provided into the ATM bypass lane.

Response 10 **The site layout has been revised to address the issues, see sheet C-2.**

Comment 11 A NO PARKING sign should be provided at the head of the HP access aisle, if there is room between the walkway and the ATM drive lane.

Response 11 **A No Parking sign has been added to the site plan see sheet C-2.**

Comment 12 A trip generation memo should be provided, comparing the proposed new bank use to the previous restaurant use.

Response 12 **A trip generation memo has been provided.**

Comment 13 No stormwater maintenance plan has been provided.

Response 13 **A comprehensive stormwater report has been provided.**

Comment 14 A landscape plan shall be provided and shade trees should be included to minimize the heat-island effect of the larger site.

Response 14 **A landscape plan has been provided and shade trees have been included, see sheet LP-1 & LP-2.**

Comment 15 A statement that lists green building components and systems is required per Section 2.5.3.1A of the Site Plan Regs.

Response 15 **A statement has been provide listing the green building components and systems.**

Comment 16 The required notes shall be added to the Site Plan per Sections 2.5.4.2E, 2.13.3 and 2.13.4 (included on the Site Plan checklist).

Response 16 **The notes have been added to the cover sheet, see sheet CV-1**

If you should have any questions or require additional information, please do not hesitate to contact me at (857) 262-0191 or aroscoe@core-states.com.

Sincerely,

Alan Roscoe, P.E.
Senior Project Manager

DESIGN AND DEVELOPMENT CONTACTS:

APPLICANT	J.P. MORGAN CHASE BANK 1450 BRICKELL AVENUE 3RD FLOOR MIAMI, FL 33131 CONTACT: CHRIS FOIT (786) 473-1769
OWNER	RICHARD FUSEGNI CONTACT: SCOTT MITCHELL (603) 475-377
CIVIL ENGINEER	CORE STATES INC. 9 GALEN STREET, SUITE 117 WATERTOWN, MA 02472 CONTACT: ALAN D. ROSCOE, P.E. (857) 500-4702
ARCHITECT	CORE STATES INC. 201 S. MAPLE AVE AMBLER, PA 19002 CONTACT: KEN MACKENZIE (267) 464-8048
SURVEYOR	ALLEN & MAJOR ASSOCIATES, INC. 100 COMMERCE WAY, SUITE 5 WOBURN, MA 01801 CONTACT: ANDREW RUGGLES (781) 362-5313

GOVERNING AGENCIES CONTACTS:

PLANNING	PLANNING DEPARTMENT 1 JUNKINS AVENUE, 3RD FLOOR PORTSMOUTH, NH 03801 CONTACT: JULIET WALKER, PLANNING DIRECTOR (603) 610-7216
BUILDING	INSPECTION DEPARTMENT 1 JUNKINS AVENUE PORTSMOUTH, NH 03801 CONTACT: ROBERT MARSILIA, CHIEF BUILDING INSPECTOR (603) 610-7243
FIRE AUTHORITY	FIRE DEPARTMENT 170 COURT STREET PORTSMOUTH, NH 03801 CONTACT: TODD GERMAIN, INTERIM FIRE CHIEF (603) 427-1515

UTILITY CONTACTS:

GAS	UNITIL 6 LIBERTY LANE WEST HAMPTON, NH 03842 (866) 933-3820
ELECTRIC AND FIRE ALARM	EVERSOURCE 55 BEARFOOT ROAD NORTHBOROUGH, MA 01532 (800) 322-3223
WATER	PORTSMOUTH PUBLIC WORKS DEPARTMENT 680 PEVERLY HILL ROAD PORTSMOUTH, NH 03801 (603) 427-1530
SEWER	PORTSMOUTH PUBLIC WORKS DEPARTMENT 680 PEVERLY HILL ROAD PORTSMOUTH, NH 03801 (603) 427-1530
TELEPHONE	VERIZON 185 FRANKLIN STREET BOSTON, MA 02107 (800) 870-9999
CABLE	COMCAST 179 W MAIN STREET AYER, MA 01432 (800) 266-2278

NOTES:

1. ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT PERPETUITY PURSUANT TO THE REQUIREMENTS TO THE SITE PLAN REVIEW REGULATIONS.
2. THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
3. ALL IMPROVEMENTS SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE OWNER AND ALL FUTURE OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL FROM THE PORTSMOUTH PLANNING DIRECTOR.
4. THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE, REPAIR AND REPLACEMENT OF ALL SCREENING AND LANDSCAPE MATERIALS.
5. ALL PLANT MATERIAL SHALL BE TENDED AND MAINTAINED IN A HEALTHY GROWING CONDITION, REPLACED WHEN NECESSARY, AND KEPT FREE OF REFUSE AND DEBRIS. ALL REQUIRED FENCES AND WALLS SHALL BE MAINTAINED IN GOOD REPAIR.
6. THE PROPERTY OWNER SHALL BE RESPONSIBLE TO REMOVE AND REPLACE DEAD OR DISEASED PLANT MATERIALS IMMEDIATELY WITH THE SAME TYPE, SIZE AND QUANTITY OF PLANT MATERIALS AS ORIGINALLY INSTALLED, UNLESS ALTERNATIVE PLANTINGS ARE REQUESTED, JUSTIFIED AND APPROVED BY THE PLANNING BOARD OR PLANNING DIRECTOR.
7. AN AMENDED SITE PLAN SHALL BE RECORDED AT THE RCRD AS ABOVE, PROVIDED THAT IN THE CASE OF A PLAN AMENDMENT THAT IS GRANTED APPROVAL BY THE PLANNING DIRECTOR OR TAC WITHOUT A HEARING BEFORE THE PLANNING BOARD, THE RECORDING OF A NOTICE OF APPROVAL SHALL BE SUFFICIENT.
8. THE APPLICANT SHALL BE THE REQUIRED SITE PLANS PRE-APPROVED BY THE REGISTRY OF DEEDS PRIOR TO SUBMITTING MYLARS TO THE PLANNING DEPARTMENT FOR SIGNATURE AND RECORDING.

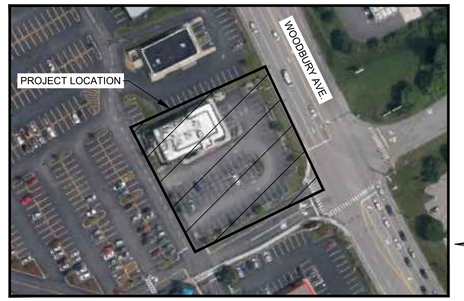
SITE PLAN APPROVAL FOR CHASE

PROPOSED CHASE BANK

1574 WOODBURY AVENUE
CITY OF PORTSMOUTH
ACCESSORS MAP 238, LOT 17
ROCKINGHAM COUNTY, NEW HAMPSHIRE 03801

ZONING MAP
1" = 1,000'

G1 - GATEWAY CORRIDOR DISTRICT
M - MUNICIPAL
SRB - SINGLE RESIDENCE B
GRB - GENERAL RESIDENCE B
MRB - MIXED RESIDENTIAL BUSINESS
OR - OFFICE RESEARCH
ABC - AIRPORT BUSINESS COMMERCIAL
GA/MH - GARDEN APARTMENT/ MOBILE HOME PARK
WI- WATERFRONT INDUSTRIAL



VICINITY MAP
1" = 100'

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LP-2	PLANTING DETAILS & SPECIFICATIONS	EVERGREEN DESIGN GROUP	
1 OF 1	EXISTING CONDITIONS SURVEY	ALLEN & MAJOR ASSOCIATES, INC.	

CORE STATES INC.
12700 HILLCREST ROAD
Suite 193
DALLAS, TX 75230
(214) 377-5060
www.core-eng.com

CLIENT

CHASE

811 Know what's below. Call before you dig.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON DESIGN PLANS AND/OR FIELD SURVEY AND MAY NOT BE ACCURATE OR REFLECT ALL UTILITIES. MEASUREMENTS TAKEN IN THE FIELD. CORE STATES, INC. DOES NOT GUARANTEE THAT LOCATIONS SHOWN ARE EXACT. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES.

REV	DATE	COMMENT	BY
1	4/6/2020	RESUBMISSION TO TOWNSHIP	KGF

DOCUMENT

SITE PLAN APPROVAL FOR CHASE BANK

SITE LOCATION

1574 WOODBURY AVENUE, PORTSMOUTH, NH 03801

ENGINEER SEAL

THOMAS C. PICKERING, P.E.

THOMAS C PICKERING No. 10218 LICENSED PROFESSIONAL ENGINEER
DATE SIGNED: 04/06/2020

CORE STATES NEW HAMPSHIRE STATE CERTIFICATE OF AUTHORIZATION #01208

SHEET TITLE

COVER SHEET

JOB #:	JPM.27086
DATE:	04/03/2020
SCALE:	AS NOTED
DRAWN BY:	DJR
CHECKED BY:	AR

SHEET NO.

CV-1

STANDARD ABBREVIATIONS

AC	ACRES
ADA	AMERICANS WITH DISABILITY ACT
ARCH	ARCHITECTURAL
BC	BOTTOM OF CURB
BF	BASEMENT FLOOR
BK	BLOCK
BL	BASELINE
BLD	BUILDING
BOL	BOLLARD
BM	BENCH MARK
BRL	BUILDING RESTRICTION LINE
CF	CUBIC FEET
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CONN	CONNECTION
CONC	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
CY	CUBIC YARDS
DEC	DECORATIVE
DEP	DEPRESSED
DIP	DUCTILE IRON PIPE
DOM	DOMESTIC
ELEC	ELECTRIC
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
ES	EDGE OF SHOULDER
EW	END OF WALL
EX	EXISTING
FES	FLARED END SECTION
FF	FINISH FLOOR ELEVATION
FH	FIRE HYDRANT
FG	FINISHED GRADE
G	GRADE
GF	GARAGE FLOOR
GH	GRADE HIGH SIDE OF WALL
GL	GRADE LOW SIDE OF WALL
GRT	GRATE
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HP	HIGH POINT
HOR	HORIZONTAL
HW	HEADWALL
INT	INTERSECTION
INV	INVERT
LF	LINEAR FOOT
LOC	LIMITS OF CLEARING
LOD	LIMITS OF DISTURBANCE
LOS	LINE OF SIGHT
LP	LOW POINT
LS	LANDSCAPE
MAX	MAXIMUM
ME	MATCH EXISTING
MIN	MINIMUM
MH	MANHOLE
MJ	MECHANICAL JOINT
OC	ON CENTER
PC	POINT OF CURVATURE
PCCR	POINT OF COMPOUND CURVATURE, CURB RETURN
PI	POINT OF INTERSECTION
POG	POINT OF GRADE
POI	POINT OF INTEREST
PROP	PROPOSED
PT	POINT OF TANGANCY
PTCR	POINT OF TANGENCY, CURB RETURN
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RCPR	REINFORCED CONCRETE WITH RUBBER GASKET
RET-WALL	RETAINING WALL
R/W	RIGHT OF WAY
S	SLOPE
SAN	SANITARY SEWER
SF	SQUARE FEET
STA	STATION
STM	STORM
TBR	TO BE REMOVED
TBRL	TO BE RELOCATED
TC	TOP OF CURB
TEL	TELEPHONE
TP	TREE PROTECTION
TW	TOP OF WALL
TYP	TYPICAL
UG	UNDERGROUND
UP	UTILITY POLE
W/L	WATER LINE
W/M	WATER METER
±	PLUS OR MINUS
°	DEGREE
Ø	DIAMETER
#	NUMBER

GENERAL SITE NOTES:

1. ALL CONSTRUCTION MATERIALS AND TECHNIQUES OF INSTALLATION SHALL MEET PERFORMANCE VALUES OF THE MATERIALS SPECIFIED AND COMPLY WITH ALL AUTHORITY HAVING JURISDICTION REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
2. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THIS PROJECT IS CONSTRUCTED IN ACCORDANCE WITH THESE DOCUMENTS AND IN COMPLIANCE WITH CODES INDICATED HEREIN. THE QUALITY OF WORKMANSHIP AND INSTALLATION OF MATERIALS SPECIFIED BY THE ARCHITECT/ENGINEER ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE ARCHITECT/ENGINEER WILL NOT BE HELD RESPONSIBLE FOR ANY SUBSTANDARD OR INSUFFICIENT WORKMANSHIP, MATERIALS, OR SERVICES PROVIDED IN THE EXECUTION OF ANY PHASE OF CONSTRUCTION OF THIS PROJECT.
3. ALL MATERIALS ARE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. THE GENERAL CONTRACTOR SHALL ENSURE THAT ALL MANUFACTURER'S WARRANTIES WILL BE HONORED.
4. ALL CONDITIONS SHOWN TO BE "EXISTING" SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE NOTED AND SUBMITTED TO THE OWNER AND THE ARCHITECT/ENGINEER FOR REVIEW. CHANGES TO THE ORIGINAL DESIGN OF THE PROJECT DUE TO EXISTING SITE CONDITIONS MUST BE APPROVED BY BOTH THE OWNER AND THE ARCHITECT/ENGINEER PRIOR TO MAKING ANY CHANGES.
5. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF EXISTING FIELD CONDITIONS AND OF ALL DRAWINGS AND SPECIFICATIONS RELATED TO THEIR FIELD. THE FAILURE TO ACQUAINT THEMSELVES WITH THIS PROJECT AND ONES FIELD OF SERVICE SHALL NOT RELIEVE THEM OF ANY RESPONSIBILITY FOR PERFORMING THEIR WORK PROPERLY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED DUE TO THE GENERAL CONTRACTOR'S FAILURE TO CONVEY THE NECESSARY KNOWLEDGE TO FAMILIARIZE WORKERS AND SUBCONTRACTORS WITH THIS PROJECT.
6. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THE SAFETY OF ALL PERSONS ON THE JOB SITE AT ALL TIMES INCLUDING (BUT NOT LIMITED TO) SUBCONTRACTORS, FACILITY EMPLOYEES, VENDORS, DESIGN STAFF PROFESSIONALS AND INSPECTION PERSONNEL.
7. THE GENERAL CONTRACTOR SHALL PROVIDE DUMPSTERS, PORTABLE TOILETS AND TEMPORARY POWER FOR UNRESTRICTED PROJECT RELATED USE BY OTHERS FOR THE DURATION OF THE PROJECT.
8. THE GENERAL CONTRACTOR SHALL COORDINATE PROJECT PHASING AND STORAGE OF MATERIALS WITH THE OWNER AND EROSION AND SEDIMENT CONTROL AUTHORITY.
9. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE RECEIVING, UNLOADING, STORING AND PROTECTION OF MATERIALS AND EQUIPMENT SUPPLIED BY THE OWNER UNTIL IT HAS BEEN INSTALLED AND ACCEPTED BY THE OWNER.
10. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE AREA CLEAN AND FREE OF DEBRIS AT ALL TIMES DURING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL POWER WASH THE ENTIRE CONSTRUCTION AREA PRIOR TO TURNOVER TO THE OWNER.
11. THE GENERAL CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF ALL PUBLIC AND PRIVATE UTILITIES, INCLUDING IRRIGATION, SPECIFIC TO THIS PROJECT PRIOR TO THE START OF ANY DEMOLITION OR CONSTRUCTION. SHOULD ANY UTILITY REQUIRE RELOCATION, CONTRACTOR SHALL COORDINATE WITH THE OWNER AND THE ARCHITECT/ENGINEER.
12. SAWCUT AND REMOVE PORTIONS OF EXISTING PAVING ONLY AS REQUIRED TO INSTALL NEW UTILITIES OR TO CONSTRUCT PROPOSED FACILITIES PER THIS PLAN. REPLACE PORTIONS REMOVED TO MATCH EXISTING FLUSH AND SMOOTH.
13. IF REQUESTED BY THE OWNER OR AUTHORITY HAVING JURISDICTION, CONTRACTOR TO PROVIDE TEMPORARY CONSTRUCTION FENCING, PER AUTHORITY HAVING JURISDICTION REQUIREMENTS OR A MINIMUM 6 FOOT HIGH, AROUND ENTIRE AREA OF CONSTRUCTION OR PER THE CLIENTS STANDARDS. FIELD VERIFY EXACT LOCATION AND SPECIFICATIONS OF FENCE WITH THE OWNER PRIOR TO START OF CONSTRUCTION. REMOVE FENCING AT COMPLETION OF PROJECT AND PATCH PAVING AS REQUIRED AT FENCE POST HOLES.
14. ALL DIMENSIONS ARE TO GROUND LEVEL IMPROVEMENTS (FACE OF CURB, CONCRETE SLAB, ETC UNLESS NOTED OTHERWISE).
15. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL PROPERTY CORNERS.
16. CONTRACTOR SHALL MATCH PROPOSED CURB AND GUTTER, CONCRETE, AND PAVEMENT TO EXISTING IN GRADE AND ALIGNMENT.
17. CONSTRUCTION SHALL COMPLY WITH ALL AUTHORITY HAVING JURISDICTION CODES AND BE CONSTRUCTED TO SAME.
18. CONTRACTOR IS RESPONSIBLE FOR REPAIRING THE DAMAGE DONE TO ANY EXISTING ITEM TO REMAIN DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. REPAIRS SHALL BE EQUAL TO, OR BETTER THAN, EXISTING CONDITIONS. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND NOTIFY OWNER PRIOR TO CONSTRUCTION START. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE INCURRED TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT.
19. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF BUILDING APPURTENANCES, STAIRS, RAMPS, SLOPE PAVING, SIDEWALKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
20. ALL DISTURBED AREAS ARE TO RECEIVE A MINIMUM OF FOUR INCHES OF TOPSOIL, UNLESS OTHERWISE NOTED IN THESE PLANS, SEED OR SOD, MULCH AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
21. EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE MAINTAINED, ABANDONED, REMOVED OR RELOCATED AS NECESSARY. ALL COST SHALL BE INCLUDED IN BASE BID.
22. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH AUTHORITY HAVING JURISDICTION REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
23. THE SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED THE SPECIFICATIONS IN THE CONTRACT DOCUMENTS AND THE OWNER/ DEVELOPER SITE WORK SPECIFICATIONS.
24. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER OF RECORD BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL.
25. IN THE EVENT THE CONSTRUCTION IS ABANDONED PRIOR TO THE COMPLETION OF THE PROJECT, ALL CONSTRUCTION AND STOCKPILED VEGETATIVE DEBRIS AND FILL SHALL BE REMOVED FROM THE SITE AND THE SITE SHALL BE STABILIZED PER THE PERMIT FOR STORM WATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (NPDES).
26. THESE PLANS ARE INTENDED TO AND SHALL COMPLY WITH AMERICANS WITH DISABILITIES ACT.
27. CONTRACTOR IS RESPONSIBLE FOR PERMITTING, INSTALLATION AND MAINTENANCE OF ALL MAINTENANCE OF TRAFFIC OPERATIONS DURING CONSTRUCTION. MAINTENANCE OF TRAFFIC SHALL CONFORM TO AUTHORITY HAVING JURISDICTION STANDARDS.
28. ALL DESIGN AND CONSTRUCTION MUST CONFORM TO THE MINIMUM STANDARDS SET DOWN IN THE AUTHORITY HAVING JURISDICTION DEVELOPMENT CODE, ZONING, AND/OR RELATED ORDINANCES, AND MINIMUM TESTING FREQUENCY REQUIREMENTS.
29. PREVIOUS SITE PLAN REMAINS IN EFFECT EXCEPT AS MODIFIED BY THE PROPOSED REVISIONS.
30. SAFETY NOTICE TO CONTRACTOR: IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES ON OR NEAR THE CONSTRUCTION SITE.

SOIL EROSION AND SEDIMENT CONTROL NOTES:

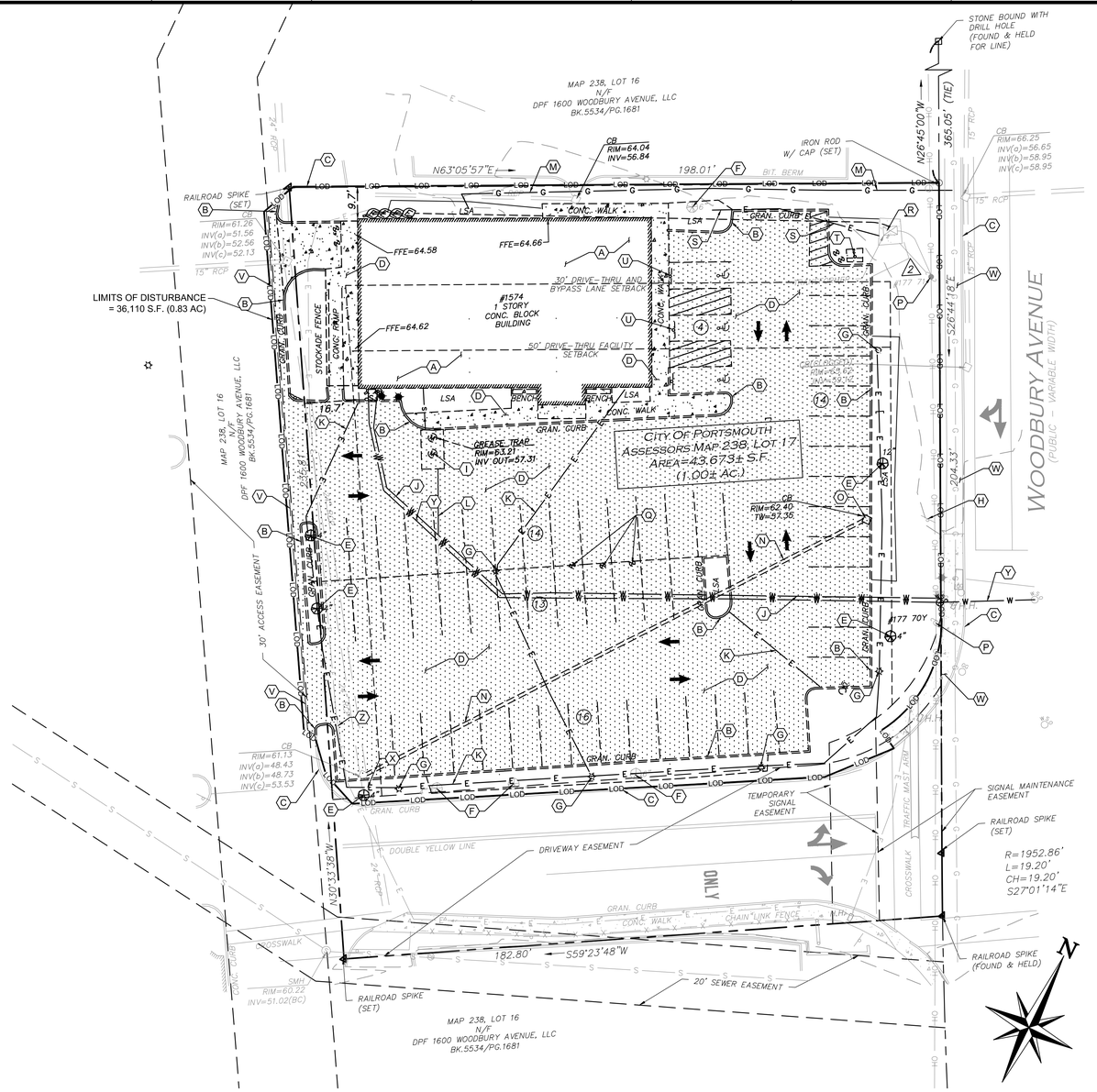
1. ALL APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN PLACE PRIOR TO ANY GRADING OPERATION AND/OR INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES.
2. SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THIS PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL AUTHORITY HAVING JURISDICTION STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL.
3. APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND/OR THE AREA IS STABILIZED.
4. THE CONTRACTOR SHALL PERFORM ALL WORK, FURNISH ALL MATERIALS AND INSTALL ALL MEASURES REQUIRED TO REASONABLY CONTROL SOIL EROSION RESULTING FROM CONSTRUCTION OPERATIONS AND PREVENT EXCESSIVE FLOW OF SEDIMENT FROM THE CONSTRUCTION SITE.
5. ANY DISTURBED AREA THAT IS TO BE LEFT EXPOSED FOR MORE THAN 14 DAYS, UNLESS OTHERWISE NOTED IN THE PLANS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND FERTILIZATION IN ACCORDANCE WITH ALL AUTHORITY HAVING JURISDICTION STANDARDS. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED.
6. ALL SEDIMENTATION STRUCTURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS AND AFTER EVERY STORM EVENT.
7. A CRUSHED STONE TIRE CLEANING PAD WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS EXISTS. THE STABILIZED PAD WILL BE INSTALLED ACCORDING TO THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS.
8. ALL CATCH BASIN INLETS WILL BE PROTECTED ACCORDING TO THE CERTIFIED PLAN.
9. ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
10. OFFSITE SEDIMENT DISTURBANCE MAY REQUIRE ADDITIONAL CONTROL MEASURES TO BE DETERMINED BY THE EROSION CONTROL INSPECTOR.
11. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE MAINTAINED ON THE PROJECT SITE DURING CONSTRUCTION.
12. THE AUTHORITY HAVING JURISDICTION SHALL BE NOTIFIED PER AUTHORITY HAVING JURISDICTION REQUIREMENTS PRIOR TO ANY LAND DISTURBANCE.
13. ANY CONVEYANCE OF THIS PROJECT PRIOR TO ITS COMPLETION WILL TRANSFER FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CERTIFIED PLAN TO ANY SUBSEQUENT OWNERS.
14. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT BE CONSTRUCTED STEEPER THAN 3:1 UNLESS OTHERWISE APPROVED BY THE AUTHORITY HAVING JURISDICTION.
15. ADJOINING PROPERTIES SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS ON THE PROPOSED SITE.
16. USE STAGED CONSTRUCTION METHODS TO MINIMIZE EXPOSED SURFACES, WHERE APPLICABLE.
17. ALL VEGETATIVE MATERIAL SHALL BE SELECTED IN ACCORDANCE WITH AMERICAN STANDARDS FOR NURSERY STOCK OF THE AMERICAN ASSOCIATION OF THE NURSERYMAN.
18. NATURAL VEGETATION AND SPECIES SHALL BE RETAINED WHERE SPECIFIED ON THE LANDSCAPING PLAN.
19. THE SOIL EROSION INSPECTOR MAY REQUIRE ADDITIONAL SOIL EROSION MEASURES TO BE INSTALLED, AS DIRECTED BY THE INSPECTOR.

DEMOLITION NOTES:

1. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS AND CODES AND OBTAIN ALL REQUIRED PERMITS FOR ANY CONSTRUCTION ACTIVITY.
2. THE CONTRACTOR SHALL CONTACT 811 DIG SAFELY BEFORE PERFORMING ANY EXCAVATION WORK.
3. THE CONTRACTOR SHALL INSTALL ALL CONSTRUCTION FENCING AND EROSION AND SEDIMENT CONTROL DEVICES PRIOR TO THE START OF ANY DEMOLITION OR CONSTRUCTION ACTIVITY.
4. ALL STRUCTURES, UTILITIES, SITE IMPROVEMENTS AND TREES DESIGNATED ON THE DRAWINGS OR DIRECTED BY THE ENGINEER TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY ALL CONSTRUCTION OPERATIONS. THIS SHALL BE ACCOMPLISHED BY ERECTING BARRIERS, GUARDS AND ENCLOSURES AS SHOWN ON THE DRAWINGS OR OTHER APPROVED MEANS. PROTECTION SHALL BE MAINTAINED UNTIL ALL WORK IN THE VICINITY OF THE WORK BEING PROTECTED HAS BEEN COMPLETED.
5. THE CONTRACTOR SHALL COMPLY WITH ALL DEMOLITION AND NEW CONSTRUCTION INSPECTIONS AS REQUIRED BY FEDERAL, STATE AND AUTHORITY HAVING JURISDICTION LAWS, REGULATIONS AND BUILDING CODES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL AUTHORITIES HAVING JURISDICTION) ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE, STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY, UNLESS OTHERWISE NOTED.
7. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE CONTRACT DOCUMENTS.
8. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH, VEGETATION FROM CLEARING AND GRUBBING, AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING FOR ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
9. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
10. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
11. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ONSITE LOCATIONS OF EXISTING UTILITIES.
12. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE GROUTED IF UNDER BUILDING.
13. ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY AND REMOVED TO THE PROPERTY LINE. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.
14. CONTRACTOR TO REPLACE ALL DEAD AND/OR DAMAGED SHRUBS IN KIND.

GENERAL UTILITY NOTES:

1. CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
2. ALL ELECTRIC, TELEPHONE AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
3. CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED BY THE ENGINEER FROM THE APPROPRIATE AUTHORITY HAVING JURISDICTION AND CONTRACTOR HAS BEEN NOTIFIED BY SAID ENGINEER.
4. PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY DRY UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM THE ENGINEER AND THE OWNER/DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION, UNLESS OTHWISE SPECIFIED IN PLANS. THE ENGINEER AND ITS OWNER SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION.
5. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SCHEDULE FOR INSTALLATION WITH THE UTILITY COMPANIES AND THE OWNER. ANY EXISTING UTILITIES DISRUPTED DURING PLACEMENT OF NEW UTILITIES SHALL BE REPAIRED AND OPERATING NORMALLY THE SAME DAY OF DISRUPTION. THE GENERAL CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF ALL EXISTING ITEMS THAT WILL BE DISRUPTED DURING THE PLACEMENT OF NEW UTILITIES AND PROVIDE THE OWNER A DETAILED PHASING SCHEDULE OUTLINING THE TIMELINE FOR INSTALLATION OF NEW UTILITIES INCLUDING THE PROPOSED TIMES THAT EXISTING ITEMS WILL BE DISRUPTED. THE NEW UTILITIES TRENCH WIDTH AND DEPTH SHALL MEET ALL LOCAL AND STATE REQUIREMENTS FOR THE DISPLACEMENT OF ALL UTILITIES. IF DIRECTIONAL BORING IS USED FOR INSTALLATION, THE ABOVE LISTED ITEMS ARE STILL REQUIRED TO BE SUBMITTED TO THE OWNER.
6. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
7. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES' INSPECTORS PER AUTHORITY HAVING JURISDICTION REQUIREMENTS BEFORE CONNECTING TO ANY EXISTING LINE AND FOLLOW ALL REQUIREMENTS AND SPECIFICATIONS.
8. UNDERGROUND UTILITY LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
9. ALL CONCRETE FOR ENCASEMENTS SHALL MEET THE AUTHORITY HAVING JURISDICTION REQUIREMENTS FOR ENCASEMENT.
10. DRAWINGS DO NOT PURPORT TO SHOW ALL EXISTING UTILITIES. CONTRACTOR TO VERIFY ALL UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
11. THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES, GRAVITY SEWER LINES AND DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE IN ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
12. THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.
13. DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.
14. ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACKFILLED AND COMPACTED IN ACCORDANCE WITH SPECIFICATIONS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
15. SHOP DRAWINGS FOR ALL MATERIALS AND APPURTENANCE SHALL BE SUBMITTED TO AND APPROVED BY THE AUTHORITY HAVING JURISDICTION UTILITY DEPARTMENT. CONTRACTOR TO COPY THE ENGINEER OF RECORD WITH APPROVED DRAWINGS AS REQUIRED. NO WORK IS TO BEGIN UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED, APPROVED AND RETURNED TO THE CONTRACTOR.
16. PER AUTHORITY HAVING JURISDICTION TIMING REQUIREMENTS, PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE AUTHORITY HAVING JURISDICTION AND THE UTILITY COMPANY AND SUPPLY THEM WITH ALL REQUIRED SHOP DRAWINGS, THE CONTRACTOR'S NAME, STARTING DATE, PROJECTED SCHEDULE AND OTHER INFORMATION AS REQUIRED. THE AUTHORITY HAVING JURISDICTION ENGINEERING INSPECTION OFFICE SHOULD ALSO BE CONTACTED PER TIMING REQUIREMENTS PRIOR TO CONSTRUCTION TO ENSURE AVAILABILITY OF INSPECTION PERSONNEL. ANY WORK PREFORMED PRIOR TO NOTIFYING THE AUTHORITY HAVING JURISDICTION ENGINEERING INSPECTION OFFICE OR WITHOUT A DEPARTMENT INSPECTOR PRESENT MAY BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE SOLE EXPENSE OF THE CONTRACTOR.
17. SANITARY SEWER, FORCE MAINS, SEWER LATERALS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS AND/OR WATER SERVICES WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS, SEWER LATERALS, AND STORM SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE BOTTOM OF THE UPPER PIPE AND THE TOP OF THE LOWER PIPE, UNLESS OTHERWISE SPECIFIED IN THE PLANS.
18. A MINIMUM HORIZONTAL DISTANCE OF 10 FEET SHOULD BE MAINTAINED BETWEEN WATER LINES AND ANY TYPE OF SEWER LINES OR OTHER SOURCES OF CONTAMINATION, UNLESS OTHERWISE NOTED IN THE PLANS. WATER LINES AND SEWERS SHALL NOT BE LAID IN THE SAME TRENCH EXCEPT ON THE WRITTEN APPROVAL OF THE AUTHORITY HAVING JURISDICTION. WATER MAINS NECESSARILY IN CLOSE PROXIMITY TO SEWERS MUST BE PLACED SO THAT THE BOTTOM OF THE WATER LINE WILL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE AT ITS HIGHEST POINT, UNLESS OTHERWISE NOTED IN THE PLANS. IF THIS DISTANCE MUST UNAVOIDABLY BE REDUCED, THE WATER LINE OR THE SEWER LINE MUST BE ENCASED IN WATERTIGHT PIPE WITH SEALED WATERTIGHT ENDS EXTENDING AT LEAST 10 FEET EITHER SIDE OF THE CROSSING, UNLESS OTHERWISE NOTED IN THE PLANS. ANY JOINT IN THE ENCASEMENT PIPE IS TO BE MECHANICALLY RESTRAINED. THE ENCASEMENT PIPE MAY BE VENTED TO THE SURFACE IF CARRYING WATER OR SEWER UNDER PRESSURE. WHERE A WATER LINE MUST UNAVOIDABLY PASS BENEATH THE SEWER LINE, AT LEAST 18 INCHES OF SEPARATION MUST BE MAINTAINED BETWEEN THE OUTSIDE OF THE TWO PIPES IN ADDITION TO THE PRECEDING ENCASEMENT REQUIREMENT, UNLESS OTHERWISE NOTED IN THE PLANS. EXCEPTIONS TO THIS MUST BE APPROVED IN WRITING BY THE AUTHORITY HAVING JURISDICTION.
19. A MINIMUM HORIZONTAL DISTANCE OF 3 FEET, UNLESS OTHERWISE NOTED IN THE PLANS, SHALL BE MAINTAINED BETWEEN WATER LINES AND OTHER UNDERGROUND OF A NONSANITARY NATURE (GAS, ELECTRIC, ETC.) EXCEPTIONS TO THIS MUST BE APPROVED IN WRITING BY THE AUTHORITY HAVING JURISDICTION.
20. ALL DIP SHALL BE CLASS 50 OR HIGHER, DUCTILE IRON FITTINGS SHALL BE CLASS 350, UNLESS OTHERWISE NOTED IN THE PLANS. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED.
21. TREES SHALL BE PLACED SO AS TO AVOID BURIED UTILITIES.
22. ALL UTILITY MAIN LENGTHS SHOWN ARE APPROXIMATE. ALL MANHOLE TOP ELEVATIONS ARE APPROXIMATE. CONTRACTOR SHALL SET MANHOLE COVER LEVEL WITH FINISH PAVEMENT GRADES.
23. PRESSURE PIPE TESTING SPECIFICATIONS SHALL REFERENCE THE AUTHORITY HAVING JURISDICTION AND/OR FIRE DEPARTMENT.
24. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE CO



DEMO PLAN
SCALE 1" = 20'

DEMOLITION KEY NOTES:

A. EXISTING BUILDING TO BE REMOVED.
B. EXISTING CURB TO BE REMOVED.
C. EXISTING CURB TO REMAIN. CONTRACTOR TO PROTECT IN PLACE.
D. EXISTING HARDSCAPE TO BE REMOVED.
E. EXISTING TREE TO BE REMOVED.
F. EXISTING TREE TO REMAIN. CONTRACTOR TO PROTECT IN PLACE.
G. EXISTING LIGHT POLE TO BE REMOVED.
H. EXISTING SIGN TO REMAIN. CONTRACTOR TO PROTECT IN PLACE.
I. EXISTING GREASE TRAP TO BE CLEAN, FILLED WITH SAND AND ABANDONED IN PLACE. CONTRACTOR TO CLEANOUT GREASE TRAP AND FILL WITH SAND. CONTRACTOR TO COORDINATE WITH LOCAL JURISDICTION FOR REQUIREMENTS.
J. EXISTING DOMESTIC WATER LINE TO BE REMOVED AND CAPPED AT PROPERTY LINE TO BE REUSED FOR PROPOSED WATER SERVICE. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY AND LOCAL JURISDICTION PRIOR TO COMMENCING WORK.
K. EXISTING LIGHTPOLE ELECTRICAL LINES TO BE CUT, CAPPED AND ABANDONED IN PLACE. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY PRIOR TO COMMENCING WORK.
L. EXISTING SEWER TO BE CUT AND CAPPED 10 FEET DOWNSTREAM OF EXISTING GREASE TRAP. CONTRACTOR TO PROVIDE LOCATION, SIZE AND INVERT TO THE ENGINEER OF RECORD PRIOR TO COMMENCING OF PROPOSED WORK.
M. EXISTING GAS SERVICE LINE TO BE CUT AND CAPPED AT PROPERTY LINE. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY PRIOR TO BEGINNING OF ANY WORK.
N. EXISTING STORM LINE TO BE REMOVED.
O. EXISTING CATCH BASIN TO BE REMOVED.
P. EXISTING UTILITY POLE TO REMAIN AND TO BE PROTECTED IN PLACE.
Q. EXISTING BOLLARDS TO BE REMOVED.
R. EXISTING TRANSFORMER TO REMAIN, AND PROTECTED IN PLACE. CONTRACTOR TO VERIFY IF THE EXISTING TRANSFORMER IS REQUIRED FROM THE UTILITY COMPANY AND ARCHITECTURAL DRAWINGS. IF A NEW SERVICE IS REQUIRED, CONTRACTOR TO COORDINATE WITH UTILITY COMPANY TO OBTAIN PROPER SERVICE.
S. EXISTING ELECTRICAL CONDUITS AND METERS TO BE REMOVED AS NECESSARY.
T. EXISTING PYLON SIGN TO BE RETROFITTED TO MATCH PROPOSED SIGNAGE.
U. EXISTING HANDICAP SIGNS TO BE REMOVED.
V. PROPOSED SAWCUT LINE.
W. EXISTING PUBLIC RIGHT-OF-WAY SIDEWALK TO REMAIN. CONTRACTOR TO PROTECT IN PLACE.
X. EXISTING 24" RCP TO BE REMOVED FOR PROPOSED WATER QUALITY CDS UNIT BY CONTECH PER PROPOSED UTILITY DESIGN. CONTRACTOR TO REMOVE/REPLACE EXISTING PIPE AS NECESSARY TO INSTALL UNIT. ANY DAMAGED TO EXISTING STRUCTURES OR PIPES ARE TO BE REPLACED.
Y. EXISTING FIRE LINE TO BE REMOVED AT EXISTING WATER MAIN TAP. CONTRACTOR TO COORDINATE WITH AUTHORITATIVE JURISDICTION AND UTILITY COMPANY PRIOR TO COMMENCING WORK.
Z. EXISTING ELECTRICAL CONDUIT TO REMAIN AND PROTECTED IN PLACE. CONTRACTOR TO VERIFY FINAL TERMINATION OF ELECTRICAL BEFORE BEGINNING OF WORK.

DEMOLITION NOTES:

1. THE TOTAL LIMITS OF DISTURBANCE FOR THIS PROJECT IS 36,110 S.F. (0.83 AC).
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION AND FOR CALLING THE APPROPRIATE ONE-CALL CENTER AT LEAST 72 HOURS IN ADVANCE OF ANY EXCAVATION.

MAINTENANCE NOTES:

ALL MEASURES STATED ON THIS PLAN SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION SHALL BE REPAIRED TO THEIR ORIGINAL CONDITION IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE INLET PROTECTION WHEN CLOGGING BECOMES APPARENT.
2. SILT SOXX SHALL BE REPAIRED OR REPLACED TO THEIR ORIGINAL CONDITION IF DAMAGED.

DEMOLITION LEGEND

- PROPERTY BOUNDARY LINE
- CENTER LINE OF EXISTING ROADWAY
- ADJOINING PROPERTY LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING FENCE
- BLOCK 101 / LOT 7 — EXISTING BLOCK NUMBER / EXISTING LOT NUMBER
- 165 — EXISTING 5' INTERVAL CONTOUR LINE
- 166 — EXISTING 1' INTERVAL CONTOUR LINE
- EXISTING TREE
- EXISTING TREE LINE
- G — G — EXISTING GAS MAIN
- EXISTING UTILITY POLE
- EXISTING STORM STRUCTURES
- S — EXISTING SANITARY STRUCTURES
- W — W — EXISTING WATER MAIN
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- E — E — EXISTING UNDERGROUND ELECTRIC
- T — T — EXISTING TELEPHONE
- OH — OH — EXISTING OVERHEAD WIRES
- S — S — EXISTING SANITARY
- EXISTING STORM
- EXISTING BUILDING
- DEMO CURB
- DEMO STRIPING
- DEMO TREE
- DEMO UTILITY POLE
- DEMO HARDSCAPE
- PROPOSED SAWCUT LINE
- LOD — LOD — LIMITS OF DISTURBANCE

E & S LEGEND

- SOX — SOX — (SS) PROPOSED SILT SOXX
- (IP) PROPOSED INLET PROTECTION

ALERT TO CONTRACTOR:

PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OF THE DRY UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM ENGINEER AND THE OWNER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. ENGINEER AND OWNER SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION.

CORE STATES INC.
12700 HILLCREST ROAD
Suite 192
DALLAS, TX 75230
(214) 377-5060
www.core-eng.com

CLIENT

CHASE

811 Know what's below. Call before you dig.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON DESIGN DRAWINGS, RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. CORE STATES, INC. DOES NOT GUARANTEE THAT EXISTING UTILITIES SHOWN ARE IN THE EXACT LOCATION NOR DOES IT GUARANTEE THAT SUCH UTILITIES SHOWN ARE ALL THE UTILITIES THAT EXIST. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES.

REV	DATE	COMMENT	BY
1	4/6/2020	RESUBMISSION TO TOWNSHIP	KGF

DOCUMENT

SITE PLAN APPROVAL FOR CHASE BANK

SITE LOCATION

1574 WOODBURY AVENUE, PORTSMOUTH, NH 03801

ENGINEER SEAL

THOMAS C. PICKERING, P.E.
DATE SIGNED: 04/06/2020
THOMAS C. PICKERING No. 10218 LICENSED PROFESSIONAL ENGINEER
04/06/2020

CORE STATES, INC. NH STATE CERTIFICATE OF AUTHORIZATION #01208

SHEET TITLE

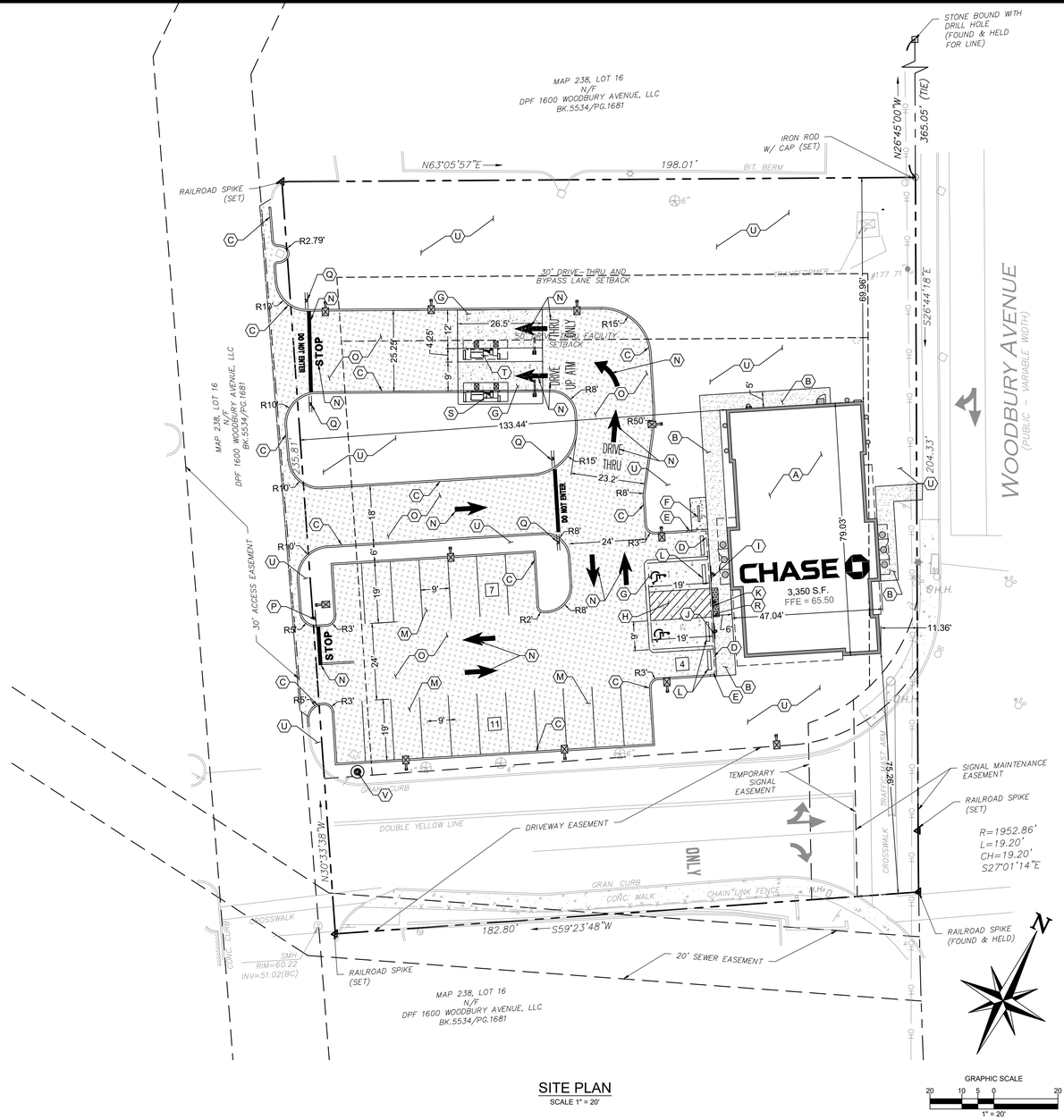
DEMOLITION PLAN

JOB #:	JPM.27086
DATE:	04/03/2020
SCALE:	AS NOTED
DRAWN BY:	DJR
CHECKED BY:	AR

SHEET NO.

C-1

User: KFURAO Plot Date/Time: Apr. 08, 20 - 13:17:23 Drawing: C:\Users\kfurao\appdata\local\temp\AcPublish_17944\JPM.27086 - P-SITE.dwg /C-1 DEMO



SITE PLAN
SCALE 1" = 20'

GRAPHIC SCALE
20 10 5 0 20
1" = 20'

GENERAL NOTES:

THIS DRAWING REFERENCES: 1574 WOODBURY AVENUE
TOPOGRAPHIC PLAN OF LAND
PREPARED BY: ALLEN & MAJOR ASSOCIATES, INC.
100 COMMERCE WAY, SUITE 5
WOBURN, MA 01801
CONTACT: ANDREW RUGGLES
TEL: (781) 362-5313
DATED: 08/28/2019

PROPERTY OWNER: RICHARD P. FUSEGNI
201 KEARSARGE WAY
PORTSMOUTH, NH 03801
CONTACT: SCOTT MITCHELL
(603) 475-377

APPLICANT: J.P. MORGAN CHASE BANK
1450 BRICKELL AVENUE 3RD FLOOR
MIAMI, FL 33131
CONTACT: CHRIS FOIT
TEL: (786) 473-1769

1) SITE ADDRESS: 1574 WOODBURY AVENUE
PORTSMOUTH, NH 03801
COUNTY OF ROCKINGHAM

2) ZONING DATA: ZONED: G-1 GATEWAY CORRIDOR DISTRICT

EXISTING USE: RESTAURANT - RUBY TUESDAYS **(PERMITTED)**
PROPOSED USE: BANK **(PERMITTED BY RIGHT)**
: DRIVE THROUGH **(CONDITIONAL USE PERMIT REQUIRED)**

§10.5B34.60 (SMALL COMMERCIAL BUILDING)

	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA, SF:	N/A	43,673 S.F.	NO CHANGE
MIN. LOT FRONTAGE, FT:	50 FT.	204.32 FT.	NO CHANGE
FRONT YARD SETBACK, FT:	0 FT. - 20 FT.	88 FT.	11.36 FT.
MIN. SIDE YARD SETBACK, FT:	10 FT.	10 FT.	69.96 FT.
MIN. REAR YARD SETBACK, FT:	15 FT.	16.4 FT.	133.44 FT.
MAX. HEIGHT, FT:	40 FT.	± 20 FT.	21.5 FT.
MAX. HEIGHT, STORIES:	3	1	1
MIN. STREET FACADE HEIGHT:	18 FT.	± 20 FT.	21.5 FT.
MIN. OPEN SPACE COVERAGE:	10%	17.79% (7,770 S.F.)	40.99% (17,901 S.F.)
MAX. BUILDING COVERAGE:	70%	10.53%	7.6%
MAX. BUILDING FOOTPRINT:	10,000 S.F.	4,600 S.F.	3,350 S.F.

3) PARKING REQUIREMENTS:
§10.1112.30 OFF-STREET PARKING REQUIREMENTS PER THE CITY OF PORTSMOUTH ZONING ORDINANCE:

FOR PROFESSIONAL, BUSINESS AND FINANCIAL SERVICES:
1 SPACE PER 350 SQUARE FEET OF GROSS FLOOR GROSS AREA

GROSS FLOOR GROSS AREA = 3,350 S.F. (MAIN BUILDING)
CALCULATION: 1 SPACE X (3,350 S.F. / 350 S.F.)
REQUIRED = 10 SPACES

EXISTING PARKING SPACES: 62 SPACES (INCLUDING 3 ACCESSIBLE SPACES)
PROPOSED PARKING SPACES: 22 SPACES (INCLUDING 2 ACCESSIBLE SPACES)

PARKING DIMENSIONS
EXISTING: VARIES
REQUIRED: 8.5' X 19'
PROPOSED: 9' X 19'

4) ALL EXISTING FEATURES ARE TO REMAIN UNLESS OTHERWISE NOTED.
5) ALL PAVEMENT MARKINGS SHALL BE LONG LIFE EPOXY.
6) PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS BY ALL OF THE PERMITTING AUTHORITIES.
7) ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY.
8) ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
9) SOLID WASTE TO BE DISPOSED OF BY CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
10) ALL EXCAVATED UNSUITABLE MATERIAL MUST BE TRANSPORTED TO AN APPROVED DISPOSAL LOCATION.
11) CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION AND SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.

SITE KEY NOTES:

A. PROPOSED 3,350 S.F. JPMORGAN CHASE BANK BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
B. PROPOSED CONCRETE SIDEWALK. REFER TO CONSTRUCTION DETAILS SHEET.
C. PROPOSED CONCRETE CURB. REFER TO CONSTRUCTION DETAILS SHEET.
D. PROPOSED DEPRESSED CONCRETE CURB. REFER TO CONSTRUCTION DETAILS SHEET.
E. PROPOSED TRANSITION CURB SECTION. REFER TO CONSTRUCTION DETAILS SHEET.
F. PROPOSED BIKE RACK ON CONCRETE PAD. REFER TO CONSTRUCTION DETAILS SHEET.
G. PROPOSED CONCRETE PAD. REFER TO CONSTRUCTION DETAILS SHEET.
H. PROPOSED 9' X 19' ACCESSIBLE PARKING SPACE AND AISLE WITH SYMBOLS OF ACCESSIBILITY. REFER TO CONSTRUCTION DETAILS SHEET.
I. PROPOSED VAN ACCESSIBLE PARKING SIGN. REFER TO CONSTRUCTION DETAILS SHEET.
J. PROPOSED ACCESSIBLE PARKING SIGN. REFER TO CONSTRUCTION DETAILS SHEET.
K. PROPOSED NO PARKING ANYTIME SIGN. REFER TO CONSTRUCTION DETAILS SHEET.
L. PROPOSED WHEEL STOP. REFER TO CONSTRUCTION DETAILS SHEET.
M. PROPOSED 9' X 19' STANDARD PARKING SPACE. REFER TO CONSTRUCTION DETAILS SHEET/
N. PROPOSED SITE MARKINGS. REFER TO CONSTRUCTION DETAILS SHEET.
O. PROPOSED ASPHALT PAVEMENT. REFER TO CONSTRUCTION DETAILS SHEET.
P. PROPOSED STOP SIGN. REFER TO CONSTRUCTION DETAILS SHEET.
Q. PROPOSED STOP & DO NOT ENTER SIGN. REFER TO CONSTRUCTION DETAILS SHEET.
R. PROPOSED DETECTABLE WARNING SURFACE. REFER TO CONSTRUCTION DETAILS SHEET.
S. PROPOSED DRIVE-UP SIGNATURE ATM CANOPY. REFER TO CONSTRUCTION DETAILS SHEET.
T. PROPOSED "FUTURE" DRIVE-UP SIGNATURE ATM CANOPY. REFER TO CONSTRUCTION DETAILS SHEET.
U. PROPOSED LANDSCAPE AREA. REFER TO LANDSCAPE PLAN FOR DETAILS.
V. PROPOSED CDS WATER QUALITY UNIT BY CONTECH. SEE CONSTRUCTION DETAILS.

SITE LEGEND

- EXISTING PROPERTY BOUNDARY LINE
- EXISTING ADJOINING PROPERTY LINE
- EXISTING ROAD CENTERLINE
- PROPOSED ROAD CENTERLINE
- PROPOSED DITCH CENTERLINE
- PROPOSED LIMITS OF BMP / DETENTION
- PROPOSED SAWCUT LINE
- EXISTING CURB
- PROPOSED CURB
- PROPOSED MOUNTABLE CURB
- PROPOSED BUILDING
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- EXISTING SANITARY STRUCTURES
- EXISTING WATER STRUCTURES
- EXISTING OVERHEAD WIRES
- PROPOSED PARKING COUNT

ALERT TO CONTRACTOR:

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REV	DATE	COMMENT	BY
1	4/6/2020	RESUBMISSION TO TOWNSHIP	KGF

DOCUMENT

SITE PLAN APPROVAL FOR CHASE BANK

SITE LOCATION

1574 WOODBURY AVENUE, PORTSMOUTH, NH 03801

ENGINEER SEAL
THOMAS C. PICKERING, P.E.
NEW HAMPSHIRE
THOMAS C PICKERING No. 10218 LICENSED PROFESSIONAL ENGINEER
04/06/2020
CORE STATES, INC. NH STATE CERTIFICATE OF AUTHORIZATION #01208

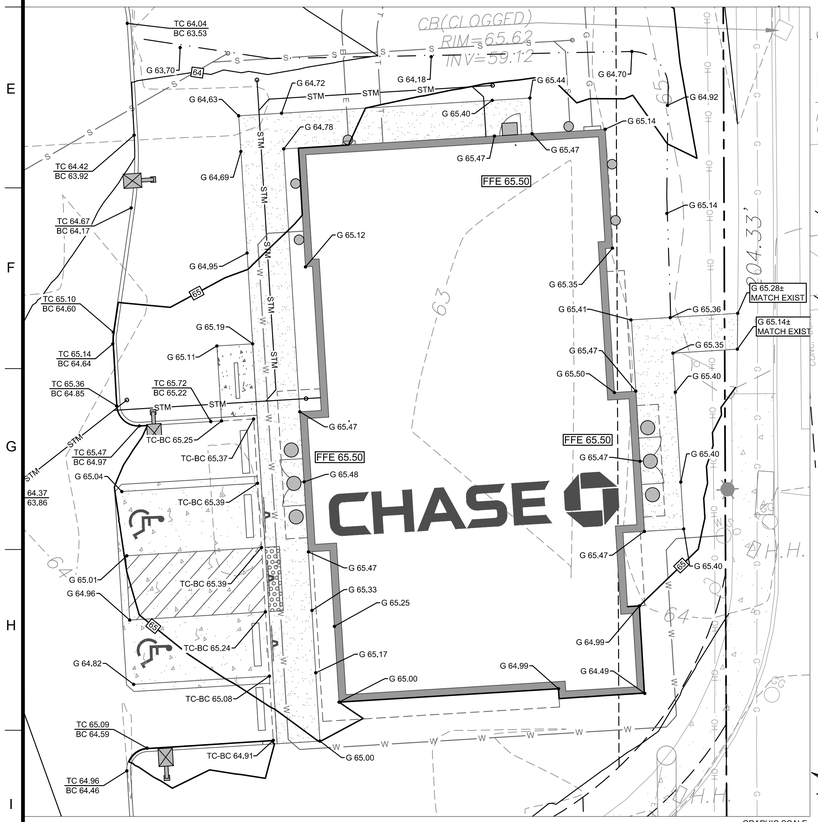
SHEET TITLE

SITE PLAN

JOB #:	JPM.27086
DATE:	04/03/2020
SCALE:	AS NOTED
DRAWN BY:	DJR
CHECKED BY:	AR

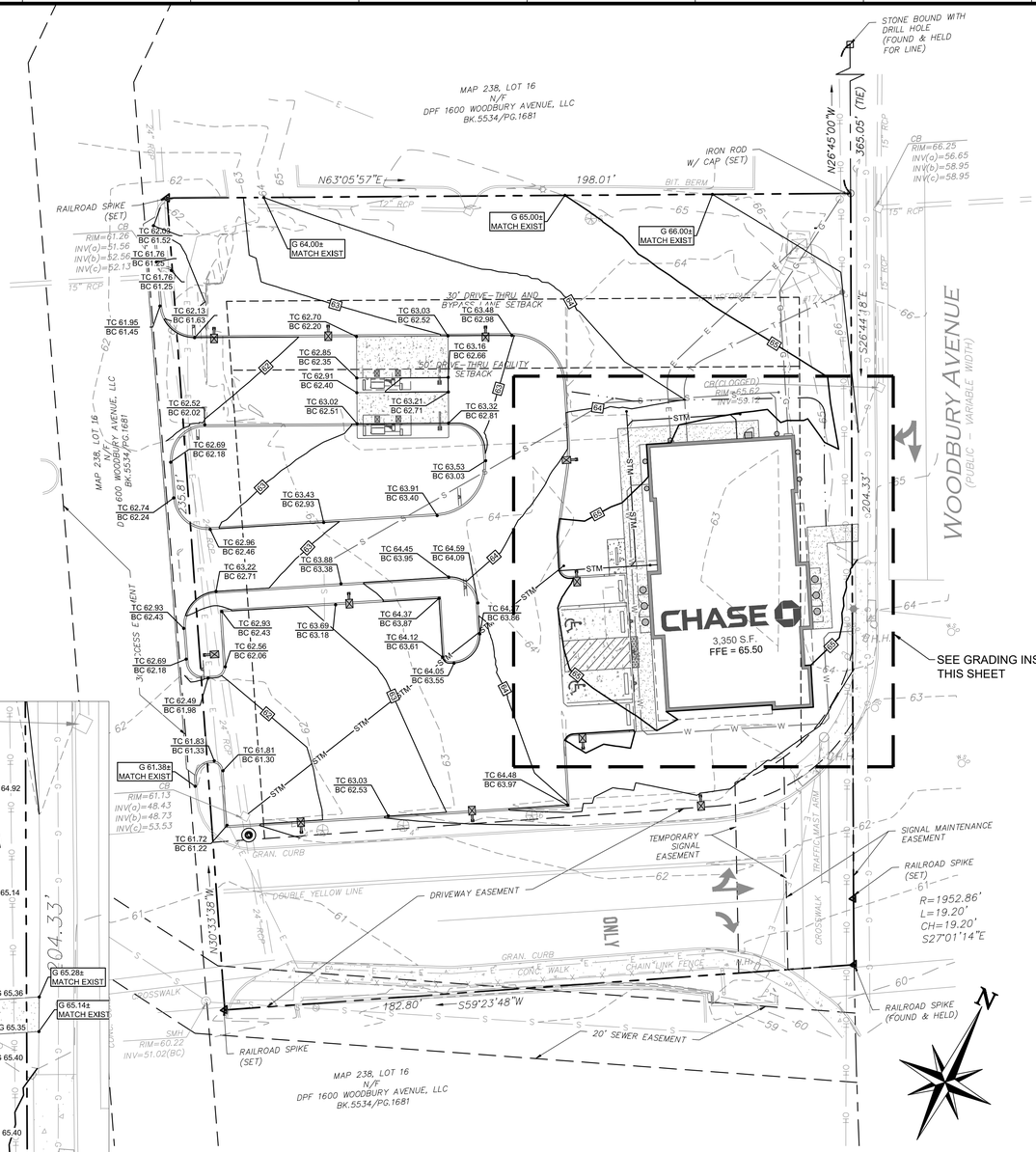
SHEET NO.

C-2



GRADING INSET
SCALE 1" = 10'

GRAPHIC SCALE
10 5 2.5 0 10
1" = 10'



GRADING PLAN
SCALE 1" = 20'

GRAPHIC SCALE
20 10 5 0 20
1" = 20'

GENERAL NOTES:

1. THIS PROJECT REFERENCES A SURVEY PREPARED BY:

EXISTING CONDITIONS SURVEY
CHASE BANK SITE
1574 WOODBURY AVENUE
PORTSMOUTH, NH
ALLEN & MAJOR ASSOCIATES, INC,
DATED 8/28/19

GRADING NOTES:

1. ALL PAVING AND GRADING CONSTRUCTION MATERIALS AND METHODS SHALL MEET THE STANDARD SPECIFICATIONS AND REQUIREMENTS OF THE TOWNSHIP.
2. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.
3. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
4. ALL CUT OR FILL SLOPES SHALL BE 4:1 OR FLATTER UNLESS OTHERWISE NOTED.
5. PRECAST STRUCTURES ARE REQUIRED.
6. STORM PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS. PRIOR TO FINAL INSPECTION.
7. EXISTING CONTOUR INTERVALS SHOWN AT 1.0 FOOT.
8. PROPOSED CONTOUR INTERVALS SHOWN AT 1.0 FOOT.
9. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
10. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
11. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 2" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
12. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE APPLICABLE STATE GENERAL PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
13. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
14. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
15. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY LAND SURVEYORS. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
16. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.
17. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
18. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT, UNLESS OTHERWISE NOTED.
19. CONTRACTOR TO MAINTAIN 1.5% MAXIMUM CROSS-SLOPE ON ALL SIDEWALKS AND CROSSWALKS. CONTRACTOR TO MODIFY PAVEMENT GRADES AS NECESSARY TO MAINTAIN MAXIMUM CROSS-SLOPE IN CROSSWALKS.
20. CONTRACTOR TO PROVIDE POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES WITH 2% MINIMUM SLOPE IN PERVIOUS AREAS AND 1.5% MINIMUM SLOPE IN PAVED AREAS UNLESS OTHERWISE NOTED.
21. FOLLOWING DEMOLITION, CLEARING/GRUBBING OPERATIONS, DESIGN CUTS, AND ADDITIONAL CUTTING TO REMOVE UNSUITABLE CONDITIONS AND PRIOR TO FILL PLACEMENT AND NEW CONSTRUCTION, THE ENTIRE SITE SHOULD BE PROOF-COMPACTED WITH MULTIPLE PERPENDICULAR PASSES OF A LARGE (15-TONSTATIC WEIGHT) VIBRATORY ROLLER TO COMPACT LOOSE, NEAR SURFACE SOILS. HOWEVER, DEPENDING ON THE GROUNDWATER LEVEL AT THE TIME OF CONSTRUCTION, IT MAY BE NECESSARY TO OPERATE THE ROLLER IN STATIC MODE IN ORDER TO MINIMIZE DRAWING WATER UP THROUGH THESE TYPICALLY GRANULAR SOIL TYPES.LOOSE, SOFT, WET OR UNSTABLE SOILS IDENTIFIED DURING THE PROOF-COMPACTION SHOULD BE EXCAVATED TO AN ACCEPTABLE BEARING STRATUM AS DETERMINED BY A PSI REPRESENTATIVE. IF PRESENT, ABANDONED FOUNDATIONS, SLABS AND UTILITIES SHOULD BE REMOVED ENTIRELY BELOW THE PROPOSED BUILDING AND PAVEMENT AREAS. ANY REQUIRED BACKFILL OR NEW FILL SHOULD COMPLY WITH SECTION 3.3 STRUCTURAL FILL MATERIAL AND PLACEMENT. THE PLACEMENT OF A GEOTEXTILE AND/OR COARSE GRADED STONE MAY BE REQUIRED TO STABILIZE THE UNDERCUT
22. CONTRACTOR TO ADD WATERPROOFING AT ALL LOCATIONS WHERE THE EXTERIOR GRADE IS PROPOSED ABOVE THE FINISHED FLOOR ELEVATION. CONTRACTOR TO COORDINATE WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.

ALERT TO CONTRACTOR:

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REV	DATE	COMMENT	BY
1	4/6/2020	RESUBMISSION TO TOWNSHIP	KGF

DOCUMENT

SITE PLAN APPROVAL FOR CHASE BANK

SITE LOCATION

1574 WOODBURY AVENUE, PORTSMOUTH, NH 03801

ENGINEER SEAL

THOMAS C. PICKERING, P.E.
NEW HAMPSHIRE
THOMAS C. PICKERING No. 10218 LICENSED PROFESSIONAL ENGINEER
04/03/2020

CORE STATES, INC. NH STATE CERTIFICATE OF AUTHORIZATION #01208

SHEET TITLE

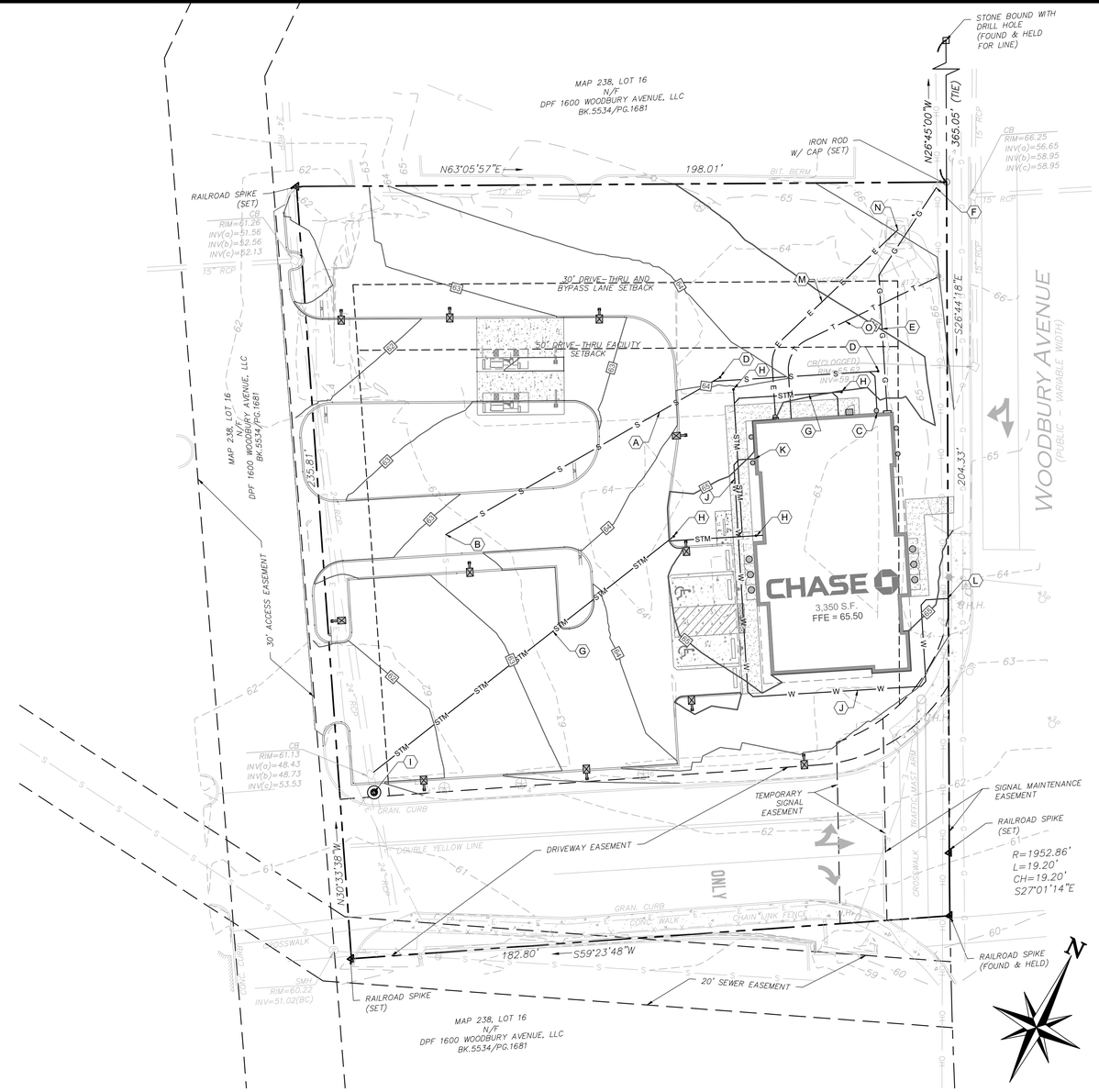
GRADING PLAN

JOB #:	JPM.27086
DATE:	04/03/2020
SCALE:	AS NOTED
DRAWN BY:	DJR
CHECKED BY:	AR

SHEET NO.

C-3

User: KFURAO Plot Date/Time: Apr. 08, 20 - 13:17:31 Drawing: C:\Users\kfurao\appdata\local\temp\AcPublish_17944\JPM.27086 - P-SITE.dwg ;C-3 GRADING



UTILITY PLAN
SCALE 1" = 20'

GENERAL NOTES:

1. THIS PROJECT REFERENCES A SURVEY PREPARED BY:

EXISTING CONDITIONS SURVEY
ALLEN & MAJOR ASSOCIATES, INC,
DATED 8/28/19

UTILITY KEY NOTES:

A. PROPOSED 4" SDR 26 SANITARY SEWER LINE AT A MINIMUM OF 2.0% SLOPE.
B. PROPOSED SANITARY CONNECTION TO EXISTING LATERAL. CONTRACTOR TO PROVIDE LOCATION OF ENTIRE LATERAL SIZE AND INVERTS PRIOR TO ANY PROPOSED WORK TO ENGINEER OF RECORD. IF EXISTING LATERAL EXTENDS UNDER THE PROPOSED BUILDING LOCATION AND FOOTING, CONTRACTOR TO WORK WITH ENGINEER OF RECORD TO RE-ROUTE EXISTING LATERAL.
C. PROPOSED SANITARY LATERAL CONNECTION TO PROPOSED BUILDING. PROPOSED INVERT TO BE MINIMUM INVERT OF 63.50'.
D. PROPOSED SANITARY SEWER CLEANOUT.
E. PROPOSED GAS SERVICE LINE. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY PRIOR TO INSTALLATION.
F. PROPOSED GAS CONNECTION TO EXISTING GAS VALVE. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY TO VERIFY IF EXISTING CONNECTION IS ADEQUATE.
G. PROPOSED 6" PVC UNDERGROUND ROOF DRAIN AT A MINIMUM 1.0% SLOPE. MINIMUM INVERT LEAVING THE BUILDING SHALL BE 1.5' BELOW FINISHED FLOOR.
H. PROPOSED ROOF DRAIN CLEAN OUT.
I. PROPOSED CDS WATER QUALITY UNIT BY CONTECH. SEE CONSTRUCTION DETAILS.
J. PROPOSED 1-1/2" WATER SERVICE LINE.
K. PROPOSED WATER SERVICE CONNECTION TO BUILDING.
L. PROPOSED WATER SERVICE CONNECTION TO EXISTING WATER SERVICE VALVE. CONTRACTOR TO DETERMINE SIZE OF EXISTING SERVICE AND COORDINATE WITH UTILITY COMPANY PRIOR TO COMMENCING OF WORK.
M. PROPOSED ELECTRICAL CONDUITS.
N. PROPOSED ELECTRICAL POINT OF CONNECTION AT EXISTING TRANSFORMER. CONTRACTOR TO VERIFY IF SERVICE PROVIDED AT TRANSFORMER IS ADEQUATE FOR THE PROPOSED BUILDING. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY PRIOR TO COMMENCING ANY WORK.
O. PROPOSED DATA CONDUITS.

UTILITY LEGEND

- EXISTING PROPERTY BOUNDARY LINE
- EXISTING ADJOINING PROPERTY LINE
- EXISTING ROAD CENTERLINE
- PROPOSED ROAD CENTERLINE
- PROPOSED DITCH CENTERLINE
- PROPOSED LIMITS OF BMP / DETENTION
- EXISTING CURB
- PROPOSED CURB
- PROPOSED MOUNTABLE
- PROPOSED BUILDING
- PROPOSED CONCRETE
- PROPOSED WATER STRUCTURES
- PROPOSED STORM STRUCTURES
- PROPOSED SANITARY STRUCTURES
- EXISTING SANITARY STRUCTURES
- EXISTING WATER STRUCTURES
- EXISTING GAS MAIN
- EXISTING WATER MAIN
- EXISTING UNDERGROUND ELECTRIC
- EXISTING TELEPHONE
- EXISTING OVERHEAD WIRES
- EXISTING SANITARY
- EXISTING STORM
- PROPOSED STORM PIPE
- PROPOSED WATER
- PROPOSED SANITARY
- PROPOSED COMMUNICATIONS LINE
- PROPOSED ELECTRIC
- PROPOSED GAS

ALERT TO CONTRACTOR:

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REV	DATE	COMMENT	BY
1	4/6/2020	RESUBMISSION TO TOWNSHIP	KGF

DOCUMENT

SITE PLAN APPROVAL FOR CHASE BANK

SITE LOCATION

1574 WOODBURY AVENUE, PORTSMOUTH, NH 03801

ENGINEER SEAL

THOMAS C. PICKERING, P.E.

STATE OF NEW HAMPSHIRE
THOMAS C. PICKERING
No. 10218
LICENSED PROFESSIONAL ENGINEER
04/06/2020

CORE STATES (NH) INC. NH STATE CERTIFICATE OF AUTHORIZATION #01208

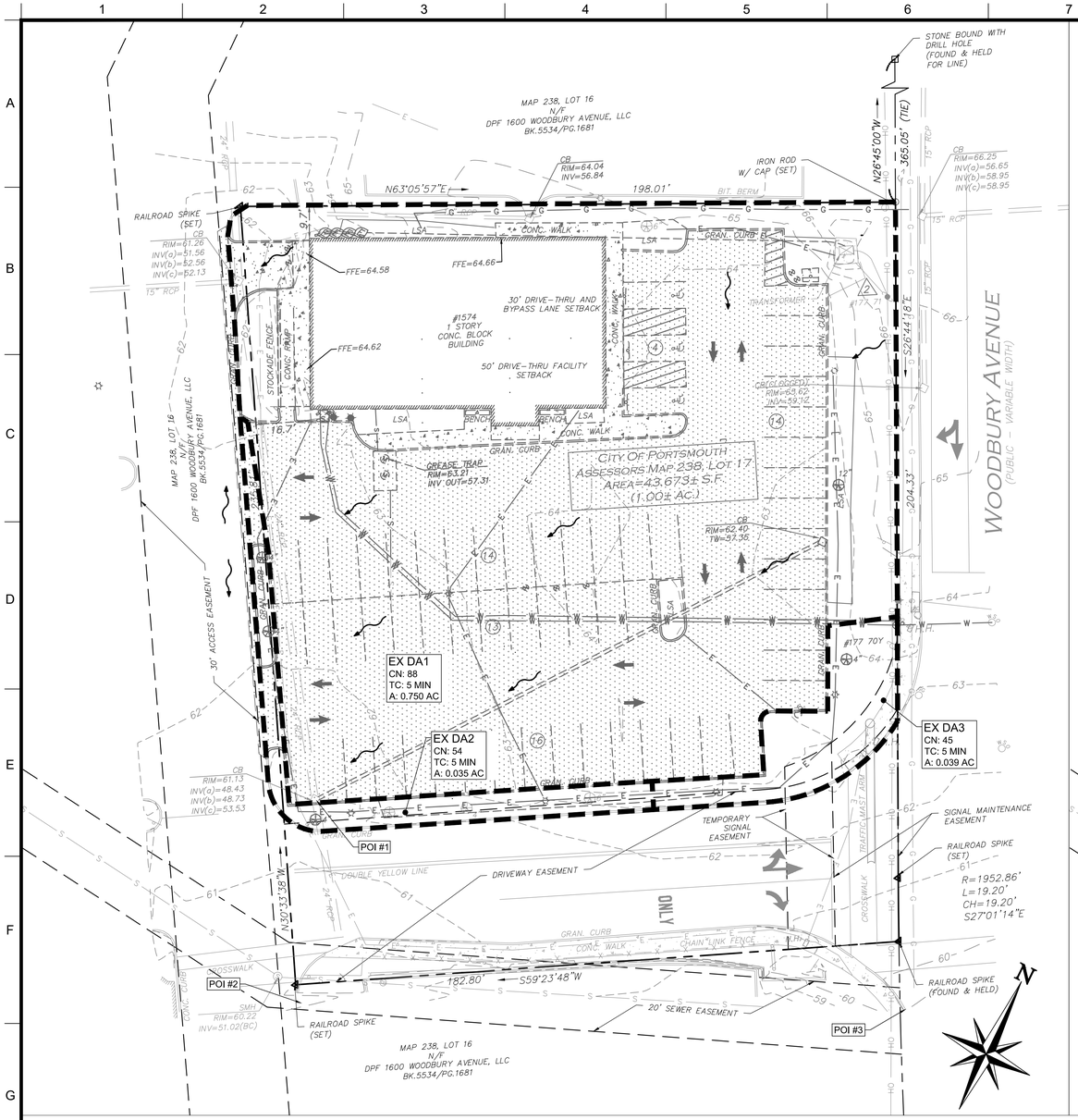
SHEET TITLE

UTILITY PLAN

JOB #:	JPM.27086
DATE:	04/03/2020
SCALE:	AS NOTED
DRAWN BY:	DJR
CHECKED BY:	AR

SHEET NO.

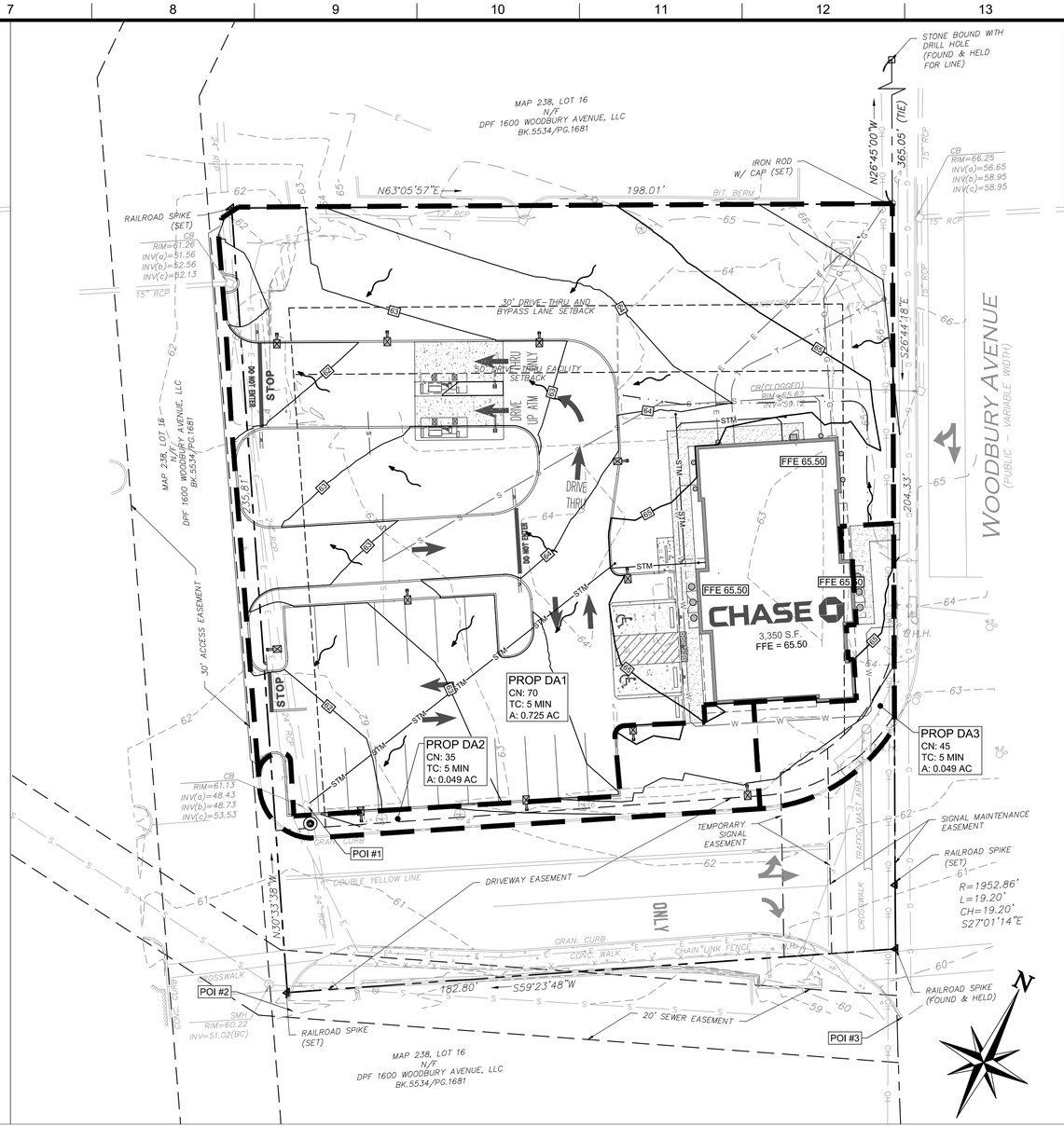
C-4



PRE-DEVELOPMENT DRAINAGE AREA MAP

SCALE 1" = 20'

GRAPHIC SCALE
20 10 5 0 20
1" = 20'



POST-DEVELOPMENT DRAINAGE AREA MAP

SCALE 1" = 20'

GRAPHIC SCALE
20 10 5 0 20
1" = 20'

EX-DA 1

IMPERVIOUS (CN 98) = 27,367 SQUARE FEET
PERVIOUS (CN 69) = 5,301 SQUARE FEET
TOTAL (CN 93) = 32,668 SQUARE FEET (0.750 AC)

EX-DA 2 (BYPASS)

IMPERVIOUS (CN 98) = 469 SQUARE FEET
PERVIOUS (CN 69) = 1,065 SQUARE FEET
TOTAL (CN 78) = 1,534 SQUARE FEET (0.035 AC)

EX-DA 3 (BYPASS PROW)

IMPERVIOUS (CN 98) = 271 SQUARE FEET
PERVIOUS (CN 69) = 1,404 SQUARE FEET
TOTAL (CN 74) = 1,675 SQUARE FEET (0.039 AC)

PROP-DA 1

IMPERVIOUS (CN 98) = 17,638 SQUARE FEET
PERVIOUS (CN 69) = 14,407 SQUARE FEET
TOTAL (CN 85) = 32,045 SQUARE FEET (0.736 AC)

PROP-DA 2 (BYPASS)

IMPERVIOUS (CN 98) = 0 SQUARE FEET
PERVIOUS (CN 69) = 2,142 SQUARE FEET
TOTAL (CN 69) = 2,142 SQUARE FEET (0.049 AC)

PROP-DA 3 (BYPASS PROW)

IMPERVIOUS (CN 98) = 338 SQUARE FEET
PERVIOUS (CN 69) = 1,352 SQUARE FEET
TOTAL (CN 74) = 1,690 SQUARE FEET (0.039 AC)

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REV	DATE	COMMENT	BY
1	4/6/2020	RESUBMISSION TO TOWNSHIP	KGF

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SITE LOCATION

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THOMAS C. PICKERING No. 10218 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
04/06/2020

CORE STATES, INC. NH STATE CERTIFICATE OF AUTHORIZATION #01208

SHEET TITLE

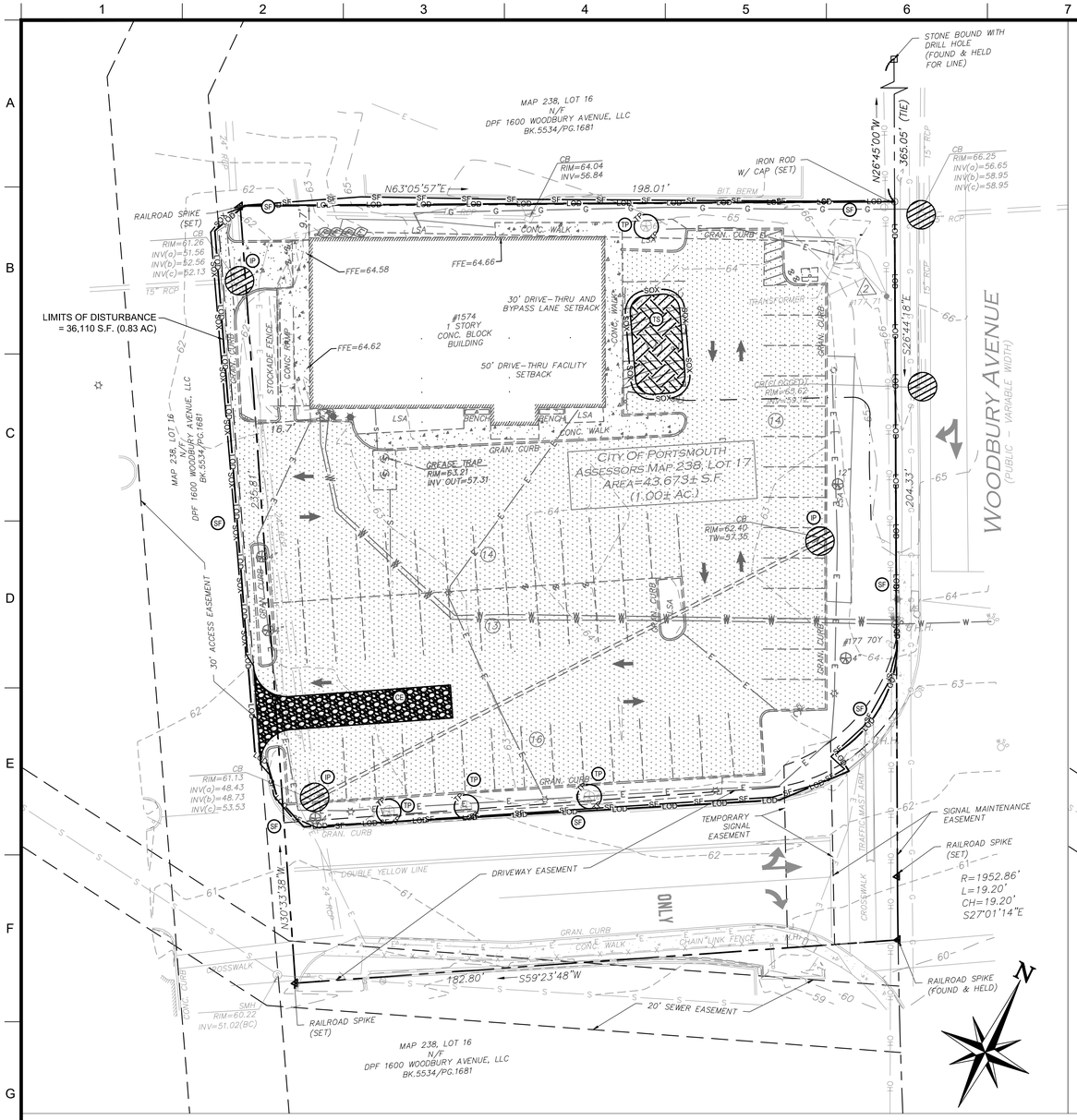
DRAINAGE AREA MAPS

JOB #:	JPM.27086
DATE:	04/03/2020
SCALE:	AS NOTED
DRAWN BY:	DJR
CHECKED BY:	AR

SHEET NO.

C-5

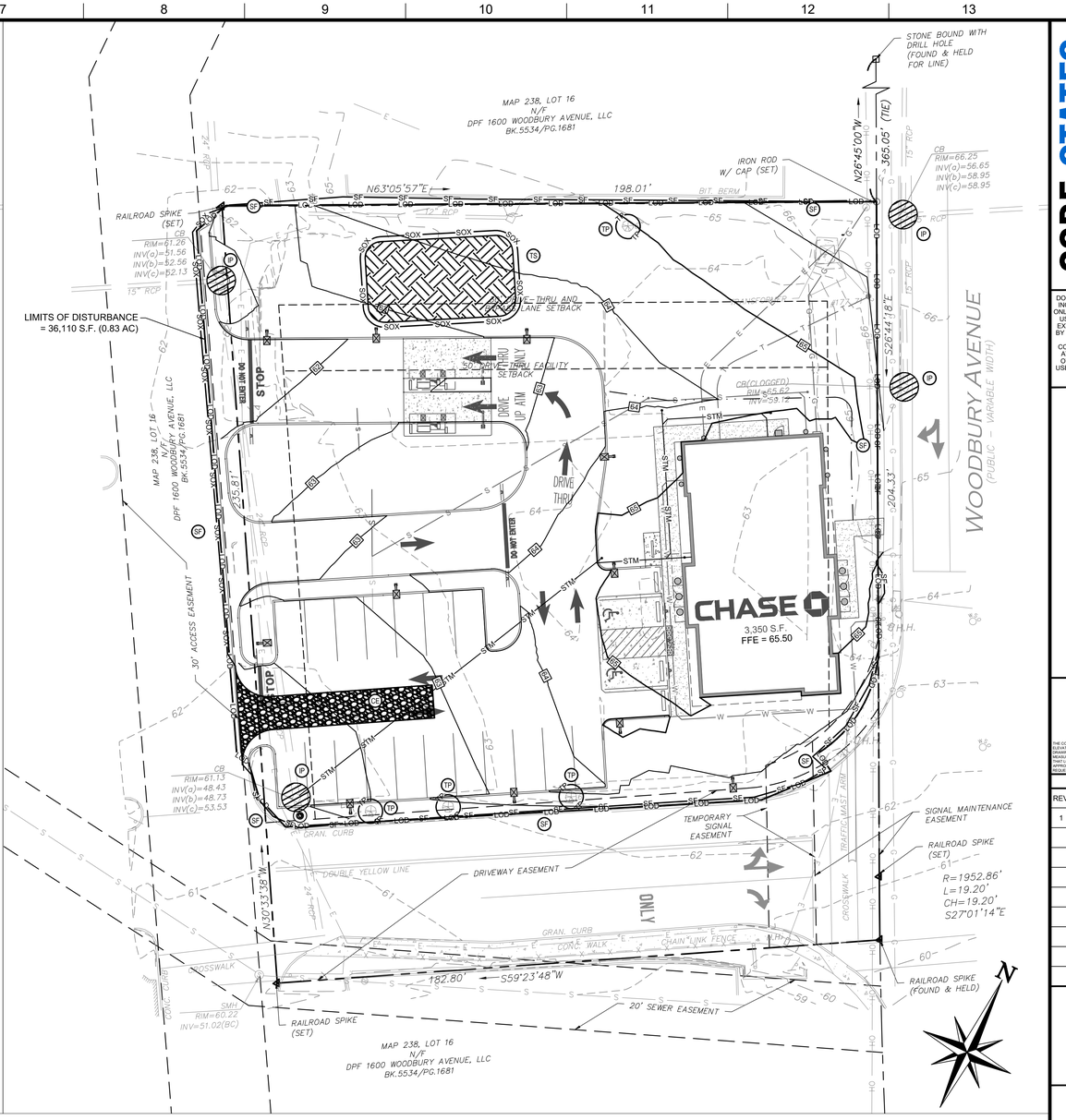
User: KFURAO Plot Date/Time: Apr. 08, 20 - 13:17:38 Drawing: C:\Users\kfurao\appdata\local\temp\AcPublish_17944\JPM.27086 - P-SITE.dwg /C-5 DRAN



EROSION & SEDIMENT CONTROL PLAN PHASE I

SCALE 1" = 20'

GRAPHIC SCALE
20 10 5 0 20
1" = 20'



EROSION AND SEDIMENT CONTROL PLAN PHASE II

SCALE 1" = 20'

GRAPHIC SCALE
20 10 5 0 20
1" = 20'

SOIL SUITABILITY AND CHARACTERISTICS

DESIGNATION	SOIL	HYDROLOGIC SOIL GROUP	DESCRIPTION
140B	CHATFIELD-HOLLIS-CANTON COMPLEX, 0 TO 8 PERCENT SLOPES, ROCKY	B	CHATFIELD, VERY STONY, AND SIMILAR SOILS: 35 PERCENT HOLLIS, VERY STONY, AND SIMILAR SOILS: 25 PERCENT CANTON, VERY STONY, AND SIMILAR SOILS: 25 PERCENT MINOR COMPONENTS: 15 PERCENT

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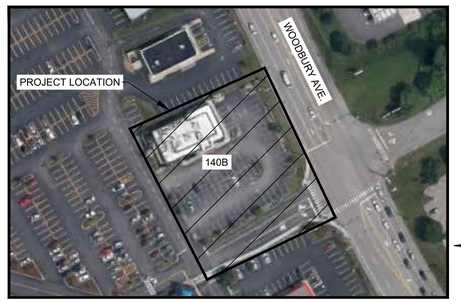

SOILS MAP
1" = 100'

N

SEQUENCE OF CONSTRUCTION:

PHASE I

1. INSTALL TEMPORARY INLET PROTECTION(S) AND SILT FENCE.
2. DEMOLISH EXISTING SITE FEATURES TO INSTALL ROCK CONSTRUCTION ENTRANCE.
3. PREPARE TEMPORARY PARKING AND STORAGE AREA AT LOCATION IN PARKING LOT DESIGNATED BY OWNER.
4. BEGIN DEMOLITION ACTIVITIES HARDSCAPE REMOVAL AND BUILDING DEMOLITION.
5. BEGIN CONSTRUCTION OF NEW CHASE BANK BUILDING.

PHASE II

1. TEMPORARILY SEED OR MULCH, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE.
2. INSTALL SUBSURFACE UTILITIES PROPOSED TO SERVE NEW CHASE BANK BUILDING AND PROPOSED STORM DRAINAGE.
3. CONTINUE WITH BALANCE OF EARTHWORK ACTIVITIES AND COMPLETE ROUGH GRADING TO ACHIEVE GRADES PROPOSED ON PLANS.
4. INSTALL CURB AND PAVEMENT SUBBASE.
5. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
6. PREPARE SITE FOR PAVING.
7. PAVE SITE AND INSTALL SIGNAGE.
8. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS.
9. CALL ENGINEER OF RECORD AFTER THE SITE APPEARS TO BE FULLY STABILIZED FOR AN INSPECTION.
10. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER APPROVAL OF THE ENGINEER OF RECORD AND STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF THE BMP.
11. CONTINUE DAILY INSPECTION REPORTS UNTIL THE FINAL DAILY INSPECTION IS SIGNED OFF BY THE OWNER THAT THE SITE IS FULLY STABILIZED AND THE PERMIT MAY BE TERMINATED.

NOTE: THE GENERAL CONTRACTOR MAY COMPLETE CONSTRUCTION-RELATED ACTIVITIES CONCURRENTLY ONLY IF ALL PRECEDING BMPS HAVE BEEN COMPLETELY INSTALLED.

MAINTENANCE NOTES:

ALL MEASURES STATED ON THIS PLAN SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION SHALL BE REPAIRED TO THEIR ORIGINAL CONDITION IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE INLET PROTECTION WHEN CLOGGING BECOMES APPARENT.
2. SILT FENCE SHALL BE REPAIRED OR REPLACED TO THEIR ORIGINAL CONDITION IF DAMAGED.
3. ALL CONSTRUCTION VEHICLES SHALL ENTER AND EXIT THROUGH THE CONSTRUCTION ENTRANCE TO BE INSTALLED FOR THE DURATION OF CONSTRUCTION ACTIVITIES.

E&S LEGEND

- SF — SILT FENCE
- TP — TREE PROTECTION
- IP — INLET PROTECTION
- TS — TOPSOIL STOCKPILE
- CE — CONSTRUCTION ENTRANCE
- LOD — LIMITS OF DISTURBANCE

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811 Know what's below. Call before you dig.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON DESIGN DRAWINGS, RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. CORE STATES, INC. DOES NOT GUARANTEE THAT LOCATIONS SHOWN ARE EXACT. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES.

REV	DATE	COMMENT	BY
1	4/6/2020	RESUBMISSION TO TOWNSHIP	KGF

DOCUMENT

SITE PLAN APPROVAL FOR CHASE BANK

SITE LOCATION

1574 WOODBURY AVENUE, PORTSMOUTH, NH 03801

ENGINEER SEAL

THOMAS C. PICKERING, P.E.
NEW HAMPSHIRE
THOMAS C. PICKERING No. 10218 LICENSED PROFESSIONAL ENGINEER
04/06/2020

CORE STATES (TX) INC. NH STATE CERTIFICATE OF AUTHORIZATION #01208

SHEET TITLE

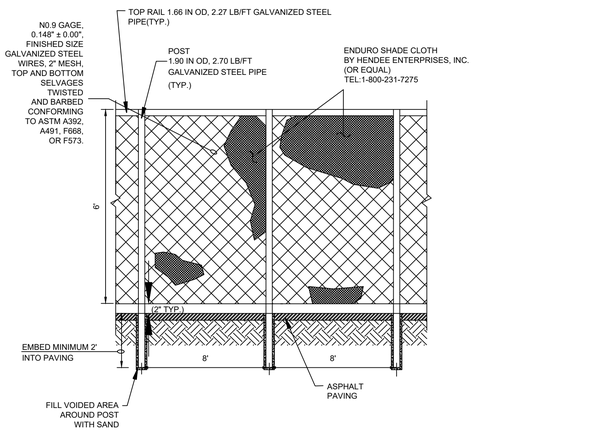
SOIL EROSION & SEDIMENT CONTROL PLAN

JOB #:	JPM.27086
DATE:	04/03/2020
SCALE:	AS NOTED
DRAWN BY:	DJR
CHECKED BY:	AR

SHEET NO.

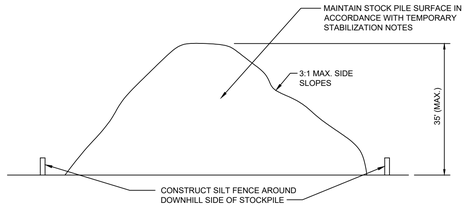
C-6

User: KFURAO Plot Date/Time: Apr. 08, 20 - 13:17:41 Drawing: C:\Users\kfurao\appdata\local\temp\AcPublish_17944\JPM.27086 - P-SITE.dwg [C-6 EROS



N.T.S.

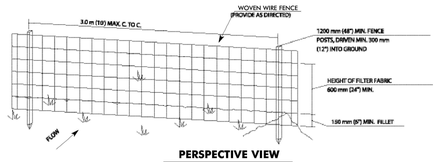
TEMPORARY CHAIN LINK CONSTRUCTION FENCE



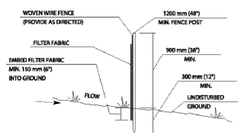
TEMPORARY STOCKPILE DETAIL

N.T.S.

SILT FENCE PERIMETER BARRIER DETAILS



PERSPECTIVE VIEW

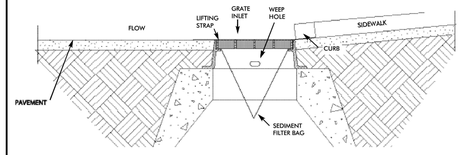


ANCHORING DETAIL

CONSTRUCTION REQUIREMENTS

1. Securely fasten filter fabric and woven wire fence (if provided) to fence posts with wire ties, staples, or other approved methods.
2. Securely fasten filter fabric to the woven wire fence with ties spaced every 600mm (24 in.) at the top, midsection and bottom.
3. When two sections of filter fabric adjoin each other, overlap the sections by 150mm (6 in.), fold, and staple at a post. Securely splice woven wire fence at a post.
4. Place silt fence 1500 mm (5 ft.) beyond the toe of slope or on the contour. At the end of silt fence runs, flare uphill.
5. Provide woven wire fence and/or closer fence post spacing in areas where high runoff volumes are anticipated, or in low spots where sediment will be collected.
6. Remove silt fence, as directed, when no longer needed. Before the silt fence is removed, stabilize with vegetation any sediment which is permitted to remain in place.

SEDIMENT FILTER BAG GRATE INLET PROTECTION DETAILS

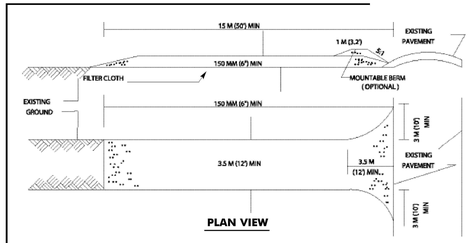


SECTION

CONSTRUCTION REQUIREMENTS

1. Remove drainage inlet grate and place sediment filter bag around the frame, replace grate and sediment filter bag in position or follow manufacturer's recommendation. Lifting straps shall be exposed and ready for maintenance procedures.
2. Inspect sediment filter bag weekly and after every rainfall event.
3. Replace, clean or remove sediment filter bag as directed.

STABILIZED CONSTRUCTION ENTRANCE DETAILS



PLAN VIEW

CONSTRUCTION REQUIREMENTS

1. Stone Size - Use 37 mm (1 1/2 in.) stone.
2. Length - Not less than 15m (50 ft.) (Except on a single residence lot where a 9m (30 ft.) minimum length would apply).
3. Thickness - Not less than 150mm (6 in.).
4. Width - 3.5 meter (twelve (12) ft.) minimum, but not less than the full width at points where ingress or egress occurs. 7 meters (twenty-four (24) ft.) if single entrance to site.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

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12700 HILLCREST ROAD
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REV	DATE	COMMENT	BY
1	4/6/2020	RESUBMISSION TO TOWNSHIP	KGF

DOCUMENT

SITE PLAN APPROVAL FOR CHASE BANK

SITE LOCATION

1574 WOODBURY AVENUE, PORTSMOUTH, NH 03801

ENGINEER SEAL

THOMAS C. PICKERING, P.E.

STATE OF NEW HAMPSHIRE
THOMAS C. PICKERING
No. 10218
04/06/2020
PROFESSIONAL ENGINEER
LICENSED

CORE STATES, INC. IN NH STATE CERTIFICATE OF AUTHORIZATION #01208

SHEET TITLE

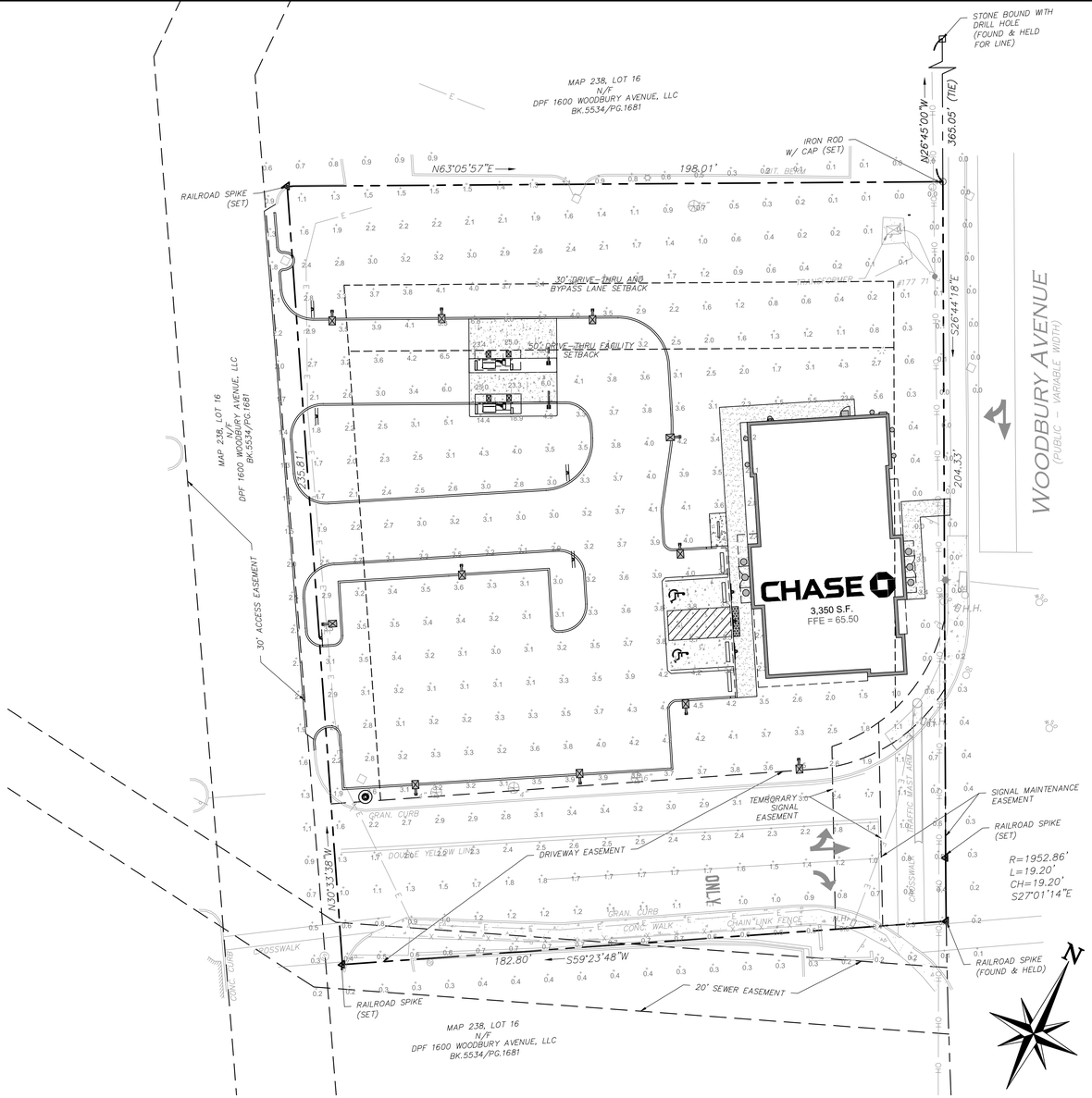
SOIL EROSION AND SEDIMENT CONTROL DETAILS

JOB #:	JPM.27086
DATE:	04/03/2020
SCALE:	AS NOTED
DRAWN BY:	DJR
CHECKED BY:	AR

SHEET NO.

C-7

User: KFURAO Plot Date/Time: Apr. 08, 20 - 13:18:17 Drawing: P:\J.P. Morgan Chase\Portsmouth, NH (1574 Woodbury Avenue) OVP\# 38100P322370 - JPM.27086\CIVIL\Drawings\Presentation\JPM.27086 - P-DTL.dwg ;C-7 E&S DET



LIGHTING PLAN MEASURED AT GROUND LEVEL

SCALE 1" = 20'

GRAPHIC SCALE

20 10 5 0 20

1" = 20'

LUMINAIRE SCHEDULE

SYMBOL	MANUFACTURER	MODEL	CATALOG	QTY	DISTRIBUTION	MOUNT HT.
	MCGRAW EDSION	GLEON GALLEON LED	GLEON-AF-02-LED-E1-5WQ-7030	11	TYPE 5	20'-0"
	E-CONOLIGHT	LED SQUARE CANOPY	E-CSA04A-W50W	4	TYPE 5	9'-10"
	AMERLUX	HORNET HP	HDL-HP-R-NC-A17-T-16-120-0-10V/HDL-HP-RL	6	TYPE 5	9'-10"
	EATON	LANTERRA 9004	9004-W2-RW-LED-3090-W-BK-L1-UNV	6	TYPE 5	9'-10"
	LUMARK	XTOR CROSSTOUR LED	XTOR6B-W-BZ-MS/DIM-L20-CBP	1	TYPE 4	12'-0"

CALCULATION SUMMARY

AREA	AVERAGE	MAX	MIN
PROPERTY ANALYSIS @ 3 FT	2.85 fc	25.0 fc	0.0 fc

LIGHTING NOTES

1. LIGHT ANALYSIS CONDUCTED AT 3-FEET ABOVE FINISHED GRADE.
2. MOUNTING HEIGHT OF THE SITE LIGHTING IS MEASURED FROM FINISH ASPHALT GRADE.
3. ALL PROPOSED FIXTURES ON TIMER TO OPERATE DURING NIGHT TIME HOURS, 30 MINUTES AFTER SUNSET AND 30 MINUTES BEFORE SUNRISE.
4. CONTRACTOR TO INSTALL FIXTURE ON COPPER LIGHTING POLE RSS-6-A-XX-S-Y-N-XX. MOUNT HEIGHTS ARE BASED ON HEIGHT ABOVE FINISHED ASPHALT GRADE.

LIGHTING LEGEND

- EXISTING PROPERTY BOUNDARY LINE
- EXISTING ADJOINING PROPERTY LINE
- EXISTING ROAD CENTERLINE
- EXISTING CURB
- PROPOSED CURB
- 1,9 FOOTCANDLE CALCULATION POINT
- PROPOSED SITE LIGHT FIXTURE
- EXISTING LIGHT FIXTURES

ALERT TO CONTRACTOR:

PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OF THE DRY UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM ENGINEER AND THE OWNER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. ENGINEER AND OWNER SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION.

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REV	DATE	COMMENT	BY
1	4/6/2020	RESUBMISSION TO TOWNSHIP	KGF

DOCUMENT

SITE PLAN APPROVAL FOR CHASE BANK

SITE LOCATION

1574 WOODBURY AVENUE, PORTSMOUTH, NH 03801

ENGINEER SEAL

THOMAS C. PICKERING, P.E.

NEW HAMPSHIRE — THOMAS C. PICKERING No. 10218 — LICENSED PROFESSIONAL ENGINEER — 04/03/2020

CORE STATES, INC. NH STATE CERTIFICATE OF AUTHORIZATION #01208

SHEET TITLE

LIGHTING PLAN

JOB #:	JPM.27086
DATE:	04/03/2020
SCALE:	AS NOTED
DRAWN BY:	DJR
CHECKED BY:	AR

SHEET NO.

C-8

User: KFURAO Plot Date/Time: Apr. 08, 20 - 13:19:16 Drawing: C:\Users\kfurao\appdata\local\temp\AcPublish_17944\JPM.27086 - P-SITE.dwg,/C-8 LGHT

McGraw-Edison

GALLEON LED
GALLEON LED

1-10 Light Squares
Solid State LED

AREA/SITE LUMINAIRE

Catalog #	Type
Project	
Comments	Date
Prepared by	

DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics
Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI, 3000K 3500K, 5000K and 6000K CCT.

Electrical
LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480Y/ Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

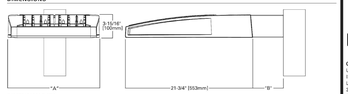
Mounting
STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. QUICK MOUNT ARM: Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Finish
Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty
Five-year warranty.

GLEON
GALLEON LED

DIMENSIONS

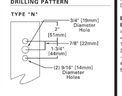


DIMENSION DATA

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length *	Weight with Arm (lbs.)	EPA with Arm * (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.86
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.

DRILLING PATTERN



*www.designlights.org

CERTIFICATION DATA
UL/cUL Wet Location Listed
ISO 9001
LM79 / LM80 Compliant
3G Vibration Rated
IP66 Rated
DesignLights Consortium™ Qualified*

ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120V-277V 50/60Hz
347V & 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)

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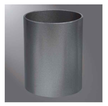
Steel Poles



RSS ROUND
STRAIGHT STEEL

Catalog #	Type
Project	
Comments	Date
Prepared by	

FEATURES

- ASTM Grade steel base plate with ASTM A366 base cover
- Hand hole assembly 3" x 5" on 5' and 6' poles, 2" x 4" on 4' poles
- 10'-30' mounting heights
- Drilled or tenon (specify)

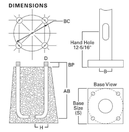
ORDERING INFORMATION

SAMPLE NUMBER: RSS42420SF2XG

Product Family	Shaft Size (inches)	Wall Thickness (inches)	Mounting Height (Feet)	Base Type	Finish	Mounting Type	Number and Location of Arms	Options (Add as Suffix)
RSS=Round Straight Steel	4=4" 5=5" 6=6"	A=0.120" M=0.188"	10=10' 15=15' 20=20' 25=25' 30=30'	S=Square Steel Base	P=Dark Bronze G=Galvanized Steel J=Textured White K=Carbon Bronze L=Dark Platinum P=Primer Powder Coat R=Textured Green B=Black T=Graphite Metallic W=Grey Y=Yellow X=Custom Color V=Black	2=2-3/8" O.D. Tenon (4" Long) 3=3-1/2" O.D. Tenon (5" Long) 4=4" O.D. Tenon (6" Long) 5=3" O.D. Tenon (6" Long) 6=2-3/8" O.D. Tenon (8" Long) 7=4" O.D. Tenon (10" Long) A=Type A Drilling D=Type D Drilling E=Type E Drilling F=Type F Drilling G=Type G Drilling J=Type J Drilling W=Grey Drilling M=Type M Drilling R=Type R Drilling S=Standard Upsweep Arm Z=Type Z Drilling	1=Single 2=2 at 180° 3=3 at 90° 4=4 at 90° 5=2 at 90° 6=3 at 90° 7=2 at 120° A=Alone	A=1/2" Tapped Hub (Specify location desired) B=3/4" Tapped Hub (Specify location desired) C=Convenience Outlet E=GFCI Convenience Outlet* G=Ground Lug H=Additional Hand Hole* L=Drilled for Bumper Glitter V=Vibration Dampener

NOTES: 1. All shaft sizes nominal. 2. Square poles are 3 at 90°, round poles are 3 at 120°. 3. Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise. Receptacle not included, provision only. 4. Additional hand hole is located 12" below pole top and 90° from standard hand hole location, unless otherwise specified.

DIMENSIONS



WARNING: Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to pole white paper WP513001EN for additional support information. Before installing, make sure proper anchor bolts and templates are obtained. The use of unauthorized accessories such as banners, signs, cameras or pennants for which the pole was not designed voids the pole warranty and may result in pole failure. Improper grounding, inadequate foundation, improper anchor bolt installation, pole modification, or failure to properly secure the pole to the foundation may cause pole failure. Pole must be used and installed as a complete pole and luminaire combination. This warranty specifically excludes failure as the result of wind gusts (or oscillation), mishaps, unanticipated uses, fatigue failure or similar phenomena resulting from induced vibration, harmonic oscillation or resonance associated with movement of air currents around the product.

Specifications and dimensions subject to change without notice. Consult your lighting representative at Eaton or visit www.eaton.com/lighting for available options, accessories and ordering information.

TD513013EN
2015-12-09 13:40:09

Lumark

XTOR
CROSSTOUR
MAXX LED

APPLICATIONS:
WALL / SURFACE
INVERTED
SITE LIGHTING

Catalog #	Type
Project	
Comments	Date
Prepared by	

DESCRIPTION

The patented Lumark Crosstour™ MAXX LED wall pack series of luminaries 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 facade/canopy illumination, 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.

SPECIFICATION FEATURES

Construction
Low-profile LED design with rugged one-piece, die-cast aluminum back box and hinged removable door. Matching housing styles incorporate both a full cutoff and refractive lens design. Full cutoff and refractive lens models are available in 58W, 81W and 102W. Patent pending secure lock hinge feature allows for safe and easy tool-less electrical connections with the supplied push-in 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 fin design extracts heat 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 molded refractive prism optical lens assembly meeting requirements for Dark Sky compliance. Refractive lens models incorporate a molded lens assembly designed for maximum forward throw. Solid state LED Crosstour MAXX luminaries are thermally optimized with eight lumen packages in cool 5000K, neutral 4000K, or warm 3000K LED color temperature (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. 58W, 81W and 102W models operate in -40°C to 40°C (-40°F to 104°F). High ambient 50°C (122°F) models available in 58W and 81W models only. Crosstour MAXX luminaires maintain greater than 89% of initial light output after 72,000 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 rated to 10kV. 120-277V 50/60Hz, 480V 60Hz, or 347V 60Hz electrical operation. 480V is compatible for use with 480Y Wye systems only.

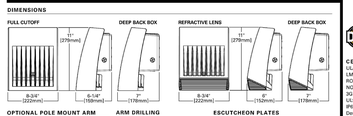
Emergency Egress
Optional integral cold weather battery emergency egress includes emergency operation test switch (available in 58W and 81W models only), an AC-ON indicator light and a premium extended rated sealed maintenance-free nickel-metal hydride battery pack. The separate emergency lighting LEDs are wired to provide redundant emergency lighting. Listed to UL Standard 924, Emergency Lighting.

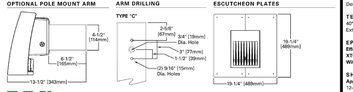
Area and Site Pole Mounting
Optional extruded aluminum 6-1/2" arm features internal bolt guides for supplied twin support rods, allowing for easy positioning of the fixture during installation to pole. Supplied with round plate adapter plate. Optional tenon adapter fits 2-3/8" or 3-1/2" O.D. Tenon.

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

Warranty
Five-year warranty.

DIMENSIONS





*www.designlights.org

CERTIFICATION DATA
UL/cUL Wet Location Listed
LM79 / LM80 Compliant
ROHS Compliant
NOM Compliant Models
3G Vibration Tested
UL924 Listed (CBP Models)
IP66 Rated
DesignLights Consortium® Qualified*

TECHNICAL DATA
40°C Ambient Temperature
External Supply Wiring 90°C Minimum

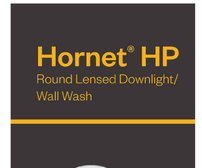
EPA
Effective Projected Area: (Sq. Ft.):
XTOR58, XTOR58, XTOR12B=0.54
With Pole Mount Arm=0.98

SHIPPING DATA:
Approximate Net Weight:
12-15 lbs. (5.4-6.8 kgs.)

TD514008EN
April 18, 2018 8:56 AM

Lumark

Submitting Agency:	**Description:** / **Project:** / **Notes:**
	Type:



Hornet® HP

Round Lensed Downlight/
Wall Wash

amerlux
Passion. Power. Performance.

Hornet HP-RELENSLW

Features

Hornet Lensed Downlights are the perfect choice for all general lighting needs. Available in Round or Square apertures, these fixtures meet the needs of commercial and hospitality markets. Optional Solite lensing provides whisper quiet aesthetics. Also available in knife-edge trimless and remodeler. Complementing Hornet Lens Wall Wash fixture available.

Product Overview

Type:	Recessed Round Lensed Downlight/Wall Wash
Wattage:	16, 23
Lumen Output:	1616 max; 72.2 lm/W (5050L optic)
CBCP:	4,748 max (5050L optic)
Color Temp:	2200K, 2700K, 3000K, 3500K, 4000K
CRI:	83 typ. (2700K, 3000K, 3500K, 4000K) 90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K)
Dimming:	CrispWhite & 3K Class A available. TRIAC & ELV (120V/277V) - 5% Dim Lutron Hi-Series (120V/277V), 2-wire/EcoSystem Hi-lume® - 1% dim Lutron Hi-Series (120V/277V), EcoSystem, Hi-lume® - 1% dim with soft-on, fade to black 0-10V (120V/277V) - 1% Dim DALI (120V/277V) - 1% Dim

PROJECT:

TYPE:

Fixture Type

Round/Square	New Construction	Remodeler	Trim	Trimless
Yes	Yes	Yes	Yes	Yes

See separate spec sheet for Square

Performance Chart

Watts	Delivered Lumens	LPW	CBCP	Color Temp
16	1,234	77.1	3,951	3000K-83
23	1,845	72.2	4,748	3000K-83

Data is based on 3000K-83 CRI fixture available on website
Data is based on 3000K optic
All wattage and LPW includes 2W thermal protector

Electrical Data

	16W		23W	
	System Watts	Amps	System Watts	Amps
120V	16	0.13	23	0.19
277V	16	0.06	23	0.08

Electronic constant current LED driver
Includes thermal protector, 2W power consumption

5 year limited warranty

LT1-QCD7 - 07/06/18 - Page 1 of 9

America reserves the right to change details that do not affect publication performance.
Amerlux® LLC - 7150 Bell Creek Drive, Cleveland, N.C. 27013 - P: (877) 662-9200 | F: (877) 662-9205 - amerlux.com

CORE STATES INC.

12700 HILLCREST ROAD
Suite 192
DALLAS, TX 75230
(214) 377-5060
www.core-eng.com

CLIENT

CHASE

811 Know what's below. Call before you dig.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON DESIGN INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS AND MEASUREMENTS TAKEN IN THE FIELD. CORE STATES, INC. DOES NOT GUARANTEE THAT LOCATIONS SHOWN ARE EXACT. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES.

REV	DATE	COMMENT	BY
1	4/6/2020	RESUBMISSION TO TOWNSHIP	KGF

DOCUMENT

SITE PLAN APPROVAL FOR CHASE BANK

SITE LOCATION

1574 WOODBURY AVENUE, PORTSMOUTH, NH 03801

ENGINEER SEAL

THOMAS C. PICKERING, P.E.
CERTIFICATE OF AUTHORIZATION #01208
STATE OF NEW HAMPSHIRE
THOMAS C. PICKERING No. 10218
04/06/2020
LICENSED PROFESSIONAL ENGINEER
CORE STATES, INC. NH STATE CERTIFICATE OF AUTHORIZATION #01208

SHEET TITLE

LIGHTING DETAILS

JOB #:	JPM.27086
DATE:	04/03/2020
SCALE:	AS NOTED
DRAWN BY:	DJR
CHECKED BY:	AR

SHEET NO.

C-9

GALLEON LED
N.T.S.

STEEL POLES
N.T.S.

LUMARK CROSSTOUR MAXX LED
N.T.S.

DOWNLIGHT / WALL WASH
N.T.S.

Lumiere

Catalog #	Type
Project	
Comments	Date
Prepared by	

DESCRIPTION

Lanterra 9004-W1 (Up or Down) and 9004-W2 (Up and Down) are 4.25" O.D., line voltage cylinder fixtures with dimmable LED. The luminaire comes in various mountings, surface mount with integral driver in the housing, remote driver mount with round and square wall plates and square wall integral driver, all of which can be mounted over standard 4 inch j box. The luminaire also comes with various field replaceable optics. It also comes with various lens, louvers and colors or dichroic filters, which can combine up to two at once to create multiple lighting effects. The fixture may be used indoors or outdoors and carries IP65 rating.

SPECIFICATION FEATURES

Material
Housing, hood and mounting stem are precision-machined from corrosion resistant billet stock 6061-T6 aluminum.

Finish
Fixtures constructed from 6061-T6 aluminum are double protected by an ROHS compliant chemical film undercoating and polyester powder coat paint finish, surpassing the rigorous demands of the outdoor environment. A variety of standard colors are available.

Hood
Hood is removable and accepts up to two internal accessories at once (lenses, louvers and filters) to achieve multiple lighting effects. Weep holes prevents water and mineral stains from collecting on the lens, even in the straight up position. The flush lens design reduces fixture length, minimizes debris collection and prevents water and mineral stains from collecting on the lens.

Gasket
Housing and hood are sealed with a high temperature silicone O-ring gasket to prevent water intrusion.

Lens
Tempered glass lens, factory sealed with high temperature silicone O-ring to prevent water intrusion and breakage due to thermal stock.

Hardware
Stainless steel hardware is standard to provide maximum corrosion resistance.

Electrical
Long-life LED system coupled with electronic driver (120-277V/50-60Hz) is compatible with TRIAC (Trailing Edge), ELV (Forward phase) and 0-10V dimming to deliver optical performance. Light can be dimmed from 100-1% while maintaining constant CCT. It will operate in -30°C to 50°C unless noted otherwise. The driver incorporates surge protection. LED's are available in 2700K, 3000K, 3500K at 80CRI and 97CRI, 4000K at 80CRI and 97CRI, 5000K at 80CRI and industry leading high output with 87% lumen maintenance at 60,000hrs.

Compliance
Components are UL recognized and luminaires are cULus listed for 50°C ambient environments unless noted otherwise, wet location listed, and ROHS compliant, IP66 Rated. DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.

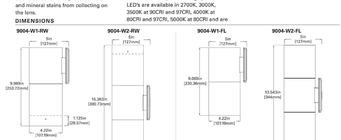
Warranty
Lumiere warrants the Lanterra series of fixtures against defects in material and workmanship for five (5) years. Auxiliary equipment such as LED drivers carries the original manufacturer's warranty.

Lanterra 9004

LED
INTERIOR / EXTERIOR
CYLINDER FLOOD LIGHT
CERTIFICATION DATA
cULus - 1598
Wet Location Listed - IP66
LM79/LM80 Compliant
ROHS Compliant

10W LED, L70/102,000 @25° Celcius
20W LED, L70/102,000 @25° Celcius
30W LED, L70/102,000 @25° Celcius

DIMENSIONS



ORDERING INFORMATION

SERIES	DIRECTION	HEOD	LED CCT & CRI	FIELD REPLACEABLE OPTIC 1	FIELD REPLACEABLE OPTIC 2	FINISH	LIGHT LEVEL	VOLTAGE	MOUNTING	OPTIONS
9004	W1 Up or Down W2 Up and Down	RW Standard Recessed Lens with wedge holes - Outdoor RI Recessed Lens with no wedge holes - Indoor FL Flush lens hood	**Standard CRI** LE1 2700 - 2700K, 80 CRI LE2 3000 - 3000K, 80 CRI LE3 3500 - 3500K, 80 CRI LE4 4000 - 4000K, 80 CRI LE5 5000 - 5000K, 80 CRI **High CRI** LE1 2701 - 2700K, 97 CRI LE3 3501 - 3500K, 97 CRI LE4 4001 - 4000K, 97 CRI LE5 4997 - 4000K, 97 CRI	S Spot M Medium F Flood W Wide Flood	S Spot M Medium F Flood W Wide Flood	**Standard Paint Finish** BZ Bronze BC City Silver WT White	L1 Light Level 1 (10W) L2 Light Level 2 (20W) L3 Light Level 3 (30W)	UNV 120-277V	Surface Mount / Wall, Ceiling, Ground SM Surface Mount - Mounts directly to junction box Thermal Conditions (unless otherwise noted SIO) 9004-W1-xxx-L2-xxx-RW-WD- 9004-W1-xxx-L3-xxx-RW-WD- 9004-W2-xxx-L2-xxx-RW-WD- **Remote Driver Housing** WRR * Remote Driver Housing - Round Wall Plate WRS * Remote Driver Housing - Square Wall Plate Thermal Conditions (unless otherwise noted SIO) 9004-W1-xxx-L2-xxx-WRx-WD- 9004-W1-xxx-L3-xxx-WRx-WD- 9004-W2-xxx-L2-xxx-WRx-WD- **Integral Driver Mount** WIT ** Wall Integral Driver Plate Thermal Conditions (unless otherwise noted SIO) 9004-WI-WD-xx-L1-xx-WIS-BAC-	SVP22* Standalone integral sensor

Notes: 1. Only available for double head option (WD) 2. 9004-W1 not available in L3 3. 9004-W2 not available in L2, L3 4. Only available for Single head, Up or down (W1) with RSM only 5. WD doubles input wattage listed 6. Remote Driver distance up to 50', For L2 (9W) remote distance up to 75'

Specifications and dimensions subject to change without notice.

TD509025EN
11-28-18

CYLINDER FLOOD LIGHT
N.T.S.

CANOPY & PARKING

E-CSA04 Series

LED Square Canopy Light
Replaces 100W PSMH

Extremely durable design and an efficacy up to 115 lumens per watt.

Performance
- Uses 66% less energy than comparable PSMH fixtures
- Delivers 25% more light than comparable PSMH fixtures
- Type VS distribution pattern

Durable
- Polyester powder-coat finish provides corrosion protection for long-lasting color
- UV-stabilized lens designed to last

Recommended Use
- Security
- Perimeter Lighting
- Entryways
- Exterior canopies

Input Voltage
- Universal (120V through 277V Operation)

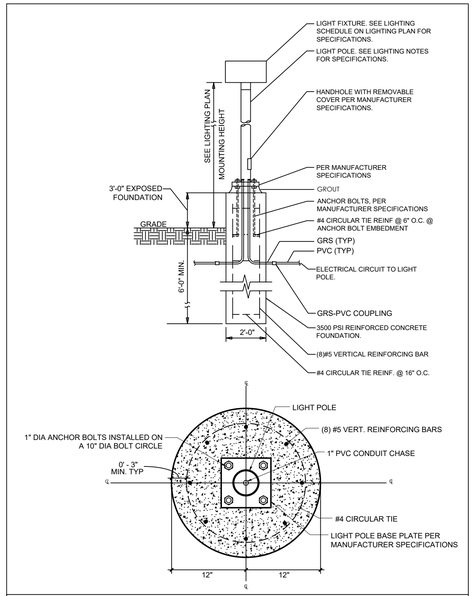
Certifications

DLC PREMIUM · UL LISTED · WET LOCATION LISTED · DLC PREMIUM · NON DIMMABLE · CREE LEDs

e-conolight® Making LED easy.

1501 96th Street, Sturtevant, WI 53177 | Phone (888) 243-9445 | Fax (262) 504-5400 | www.e-conolight.com

RECESSED CANOPY LIGHT
N.T.S.



LIGHT POLE DETAIL
N.T.S.

GameTime
A PLAYCORE Company
1-800-235-2440

7700

LOOP BIKE RACK

ISSUED/REVISED: 7/17/12

INSTALLATION DETAIL — 7702, 7703
PARTS LIST REFERENCE

7703

3'-2 3/8" [97.47 cm]
0'-2 3/8" [6.03 cm]

SPECIFICATIONS

BIKE RACK: Bike Rack shall be fabricated of 2 3/8" O.D. galvanized pipe.
FINISH: Bike Rack shall have a bright powdercoat finish.
GENERAL: Bike Rack shall extend approximately 24" below ground level. Rack will be approximately 35-1/2" above ground level.
SPECIFICATIONS: GAMETIME has a policy of continuous improvement and reserves the right to discontinue or change specifications without notice.

PAGE 3

INSTALLATION DRAWINGS

3'-0" [91.44 cm]
1'-6" DIA x 2'-3" DEEP
7703
GROUND PLAN

1'-6" [45.72 cm]
2'-0" [60.96 cm]

SIGN HEIGHT, WIDTH & SHAPE VARY
BREAKAWAY STEEL U-POST SIGN SUPPORT ASSEMBLY
FINISHED GRADE
7'-0"
3'-6"
4" MAX

TRAFFIC SIGN POST DETAIL

NTS

4" TRAFFIC BLUE STRIPING 2'-0" O.C. (TYP.)
19.0'
9.0'
9.0' (VAN)
9.0'
4" TRAFFIC WHITE STRIPING (TYP.)
STANDARD 90° ACCESSIBLE SPACE

PARKING STRIPING DETAIL

NTS

18'-0" OR (AS REQUIRED)
4" MIN
6" MAX
STRIPING DETAIL

20°
5'-0"
3'-0" MAX
2'-0" MIN.
1'-6"
8"
1'-6"
ARROW DETAIL

NOTE:
STRIPING TO THERMOPLASTIC REFLECTIVE WHITE PAINT, TYP. BUT USE YELLOW PAINT ON WHEN WHITE PAINT DOES NOT PROVIDE SUFFICIENT CONTRAST.

PAVEMENT STRIPING DETAIL

NTS

30"
30"
DO NOT ENTER
R5-1
STANDARD RED AND WHITE SIGN

"DO NOT ENTER" SIGN

N.T.S.

RESERVED PARKING
VAN ACCESSIBLE
PENALTY
$250 1ST OFFENSE
SUBSEQUENT OFFENSES
$250 MIN. AND/OR
UP TO 90 DAYS
COMMUNITY SERVICE
TOW-AWAY ZONE
80" MINIMUM
FINISH GRADE (TYP.)

RESERVED PARKING
R7-8 NY
12"x18"

VAN ACCESSIBLE
R7-8va
6"x12"

PENALTY
$250 1ST OFFENSE
SUBSEQUENT OFFENSES
$250 MIN. AND/OR
UP TO 90 DAYS
COMMUNITY SERVICE

- ALL EXPOSED PAINTED SURFACES SHALL BE COATED WITH MATTHEWS #282-208SP VOC GLOSS CLEAR, WITH MINIMUM 2 MILS DRY FILM THICKNESS (DFT) PER MATTHEWS APPLICATIONS SPECIFICATIONS.
- EMBEDDED PORTION OF POST SHALL BE PRIMED AND PAINTED FOR CORROSION PROTECTION

RESTRICTED PARKING SIGN DETAIL

N.T.S.

2" ABOVE PRIMARY ROOF DRAIN INLET
ROOF DRAIN W/ CAST IRON DOME W/DAM
CLAMP RING- GRAVEL STOP
REFER TO ARCHITECTURAL DWGS. FOR ROOF CONSTRUCTION
DRAIN RECEIVER
ADJUSTABLE COLLAR
UNDERDECK CLAMP
(SVCI NO-HUB) CONNECTION (TYPICAL)
1" FIBERGLASS PIPE INSULATION MIN 15-0" DOWNSTREAM OF DRAIN

EXTERIOR WALL
ANCHOR TIGHT TO WALL AS POSSIBLE
SECONDARY STORM WATER LEADER (SVCI NO-HUB)
DOWNSPOUT NOZZLE (DNZ) W/ RODENT SCREEN
1'-0" ABOVE FIN. GRADE UNLESS NOTED OTHERWISE
GRADE
FLOOR SLAB

NOTES:
1. DOWNSPOUT NOZZLES TO BE USED IN SECONDARY/OVERFLOW DRAINAGE SYSTEMS ONLY.
2. COORDINATE DOWNSPOUT LOCATIONS WITH SITE PLANS.

ROOF DRAIN OVERFLOW DETAILS

N.T.S.

LENGTH VARIES
24"
LENGTH VARIES SEE PLAN
4"
STOP
R1-1
30"x30"

NOTE: ALL SIGNS SHALL MEET THE RETRO-REFLECTIVITY REQUIREMENTS OF MUTCD. ADDITIONALLY THE DATE OF THE MANUFACTURE SHOULD BE PERMANENTLY AFFIXED TO THE BACK OF THE SIGN.

PAINTED STOP BAR & SIGN DETAIL

N.T.S.

1.5"
2.#4 BAR CONTINUOUS EXCEPT AT EXPANSION JOINT
CAST-IN-PLACE CONCRETE CURB
6"
1/2" COMPRESSIBLE FILLER WHERE PAVEMENT IS CONCRETE
18"
PAVEMENT- REFER TO DETAILS
6" MIN. COMPACTED GRANULAR BASE

NOTES:
1.) CONCRETE CURB SHALL BE POURED WITH CLASS AAA CONCRETE WITH A 4,500 PSI 28-DAY COMPRESSIVE STRENGTH.

2.) CURBING SHALL BE CONSTRUCTED IN TEN-FOOT LENGTHS, A PRE-MOLDED BITUMINOUS IMPREGNATED EXPANSION JOINT HAVING A MINIMUM THICKNESS OF 1/4 INCH SHALL BE PLACED BETWEEN SECTIONS OF CURVED CURB AND AT INTERVALS OF NOT MORE THAN 50 FEET. INTERMEDIATE JOINTS BETWEEN TEN-FOOT SECTIONS SHALL BE SAW CUT. HOWEVER, WHEREVER A DRIVEWAY ENTERS A STREET, THAT AREA OF THE DRIVEWAY SHALL NOT HAVE A CURB JOINT AND CAN BE CONSTRUCTED IN LENGTHS NOT LONGER THAN 20 FEET.

ON-SITE CONCRETE CURB DETAIL

NTS

NOTE: PROVIDE CONCRETE CONTROL AND EXPANSION JOINTS AS REQUIRED. CONTROL JOINTS SHALL BE AT EVERY 5 FEET. EXPANSION JOINTS SHALL BE EVERY 30 FEET AT FULL DEPTH.

MEET GRADE AT PERIMETER OF CONCRETE MAT
WIDTH (SEE PLAN)
6" THICK CLEAN CRUSHED STONE
EXISTING COMPACTED SUBGRADE
6" X 6" GRID .W2.9 X W2.9 WELDED WIRE MESH
FINISHED GRADE SHALL BE FLUSH WITH ABUTTING CONCRETE SURFACE
4" THICK SIDEWALKS, 6" THICK VEHICLE PARKING/ DRIVING, AIR ENTRAINED CONCRETE 4,500 PSI AT 28 DAYS

CONCRETE PAD AND SIDEWALK DETAIL

NTS

2.0" NH DOT TYPE B PAVEMENT SURFACE COURSE TOP ASPHALTIC CONCRETE
3.0" NH DOT TYPE E PAVEMENT BASE COURSE BOTTOM ASPHALTIC CONCRETE
6.0" NH DOT CRUSHED GRAVEL PER NHDOT 304.3
EXISTING GROUND COMPACTED TO MINIMUM 95 PERCENT OF MAXIMUM DRY DENSITY. PROOF-ROLLED APPROVED SUBGRADE.

NOTE:
- ALL PAVEMENT MATERIALS AND CONSTRUCTION PROCEDURES SHOULD CONFORM TO PA DOT AND APPROPRIATE CITY, OR COUNTY REQUIREMENTS. PENNSYLVANIA DEPARTMENT OF TRANSPORTATION *PUBLICATION 408 / 2016 SPECIFICATIONS.*

ASPHALT PAVEMENT DETAIL

NTS

CONCRETE CURB SEE DETAIL
1'
SAWCUT/SEAL
EXISTING PAVEMENT
SEE PAVEMENT SECTION DETAIL.
PROPOSED SUB-BASE SEE PAVEMENT SECTION DETAIL

PAVEMENT RESTORATION DETAIL

NTS

CORE STATES INC.
12700 HILLCREST ROAD
Suite 193
DALLAS, TX 75230
(214) 377-5060
www.core-eng.com

CLIENT
CHASE

811 Know what's below. Call before you dig.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON DESIGN SURVEY INFORMATION AND MAY NOT REFLECT ACTUAL CONDITIONS. VERIFICATION OF MEASUREMENTS TAKEN IN THE FIELD. CORE STATES, INC. DOES NOT GUARANTEE THAT LOCATIONS SHOWN ARE EXACT. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES.

REV	DATE	COMMENT	BY
1	4/6/2020	RESUBMISSION TO TOWNSHIP	KGF

DOCUMENT
SITE PLAN APPROVAL FOR CHASE BANK

SITE LOCATION
1574 WOODBURY AVENUE, PORTSMOUTH, NH 03801

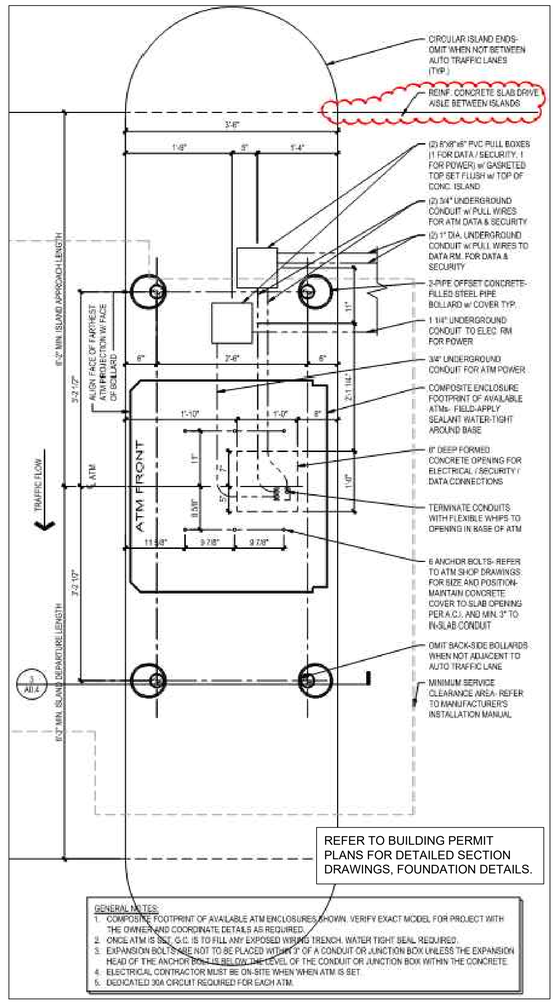
ENGINEER SEAL
THOMAS C. PICKERING, P.E.
STATE OF NEW HAMPSHIRE
THOMAS C. PICKERING No. 10218 PROFESSIONAL ENGINEER LICENSED
04/06/2020
CORE STATES INC. HOLDING NH STATE CERTIFICATE OF AUTHORIZATION #01208

SHEET TITLE
CONSTRUCTION DETAILS

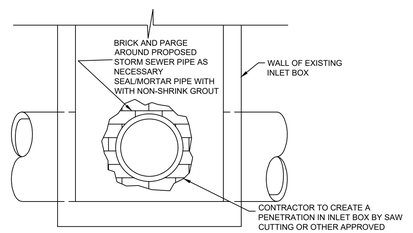
JOB #:	JPM.27086
DATE:	04/03/2020
SCALE:	AS NOTED
DRAWN BY:	DJR
CHECKED BY:	AR

SHEET NO.
CD-1

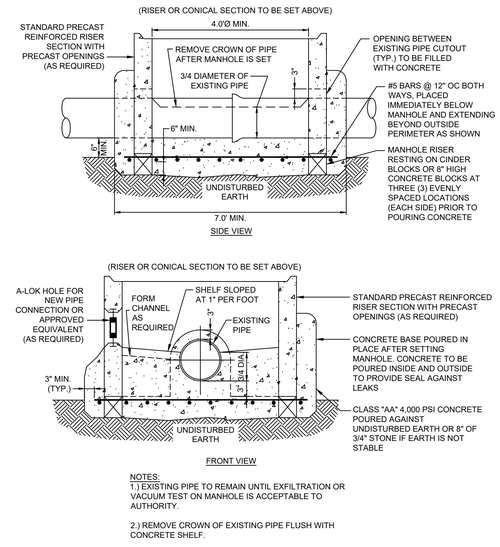
User: KFURAO Plot Date/Time: Apr. 08, 20 - 13:19:55 Drawing: P:\J.P. Morgan Chase\Portsmouth, NH (1574 Woodbury Avenue) OVP# 38100P322370 - JPM.27086\CIVIL\Drawings\Presentation\JPM.27086 - P-DTL.dwg ,CD-1 DETS



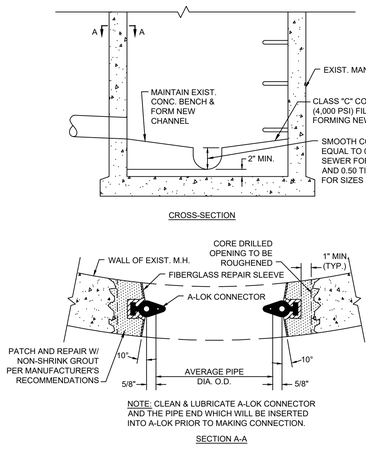
DRIVE -UP ATM ISLAND DETAIL
N.T.S.



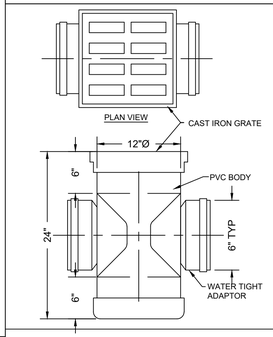
PIPE CONNECTION TO EXISTING INLET DETAIL
NTS



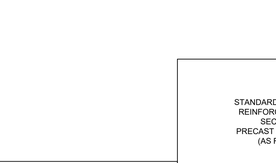
DOGHOUSE MANHOLE DETAIL
NTS



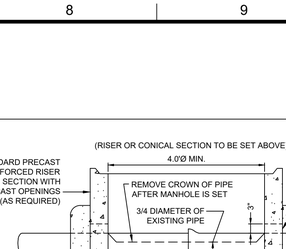
PIPE CONNECTION TO EXISTING MANHOLE DETAIL
N.T.S.



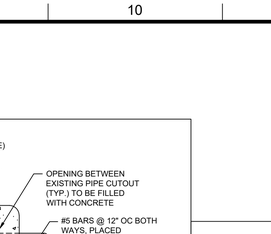
12" YARD DRAIN DETAIL
N.T.S.



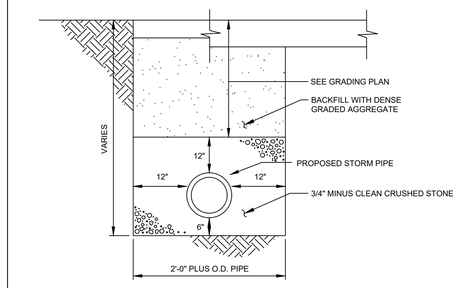
CONCRETE ENCASEMENT DETAIL
N.T.S.



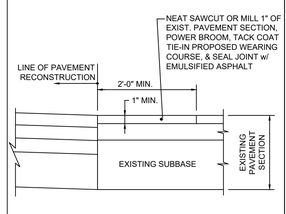
TYPICAL CLEANOUT DETAIL (PAVED AREAS)
N.T.S.



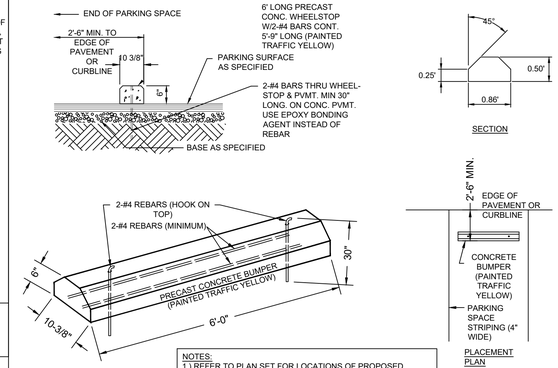
TYPICAL CLEANOUT DETAIL (LANDSCAPED AREAS)
N.T.S.



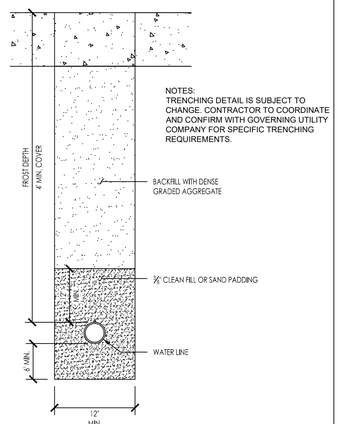
STORM SEWER TRENCH DETAIL
N.T.S.



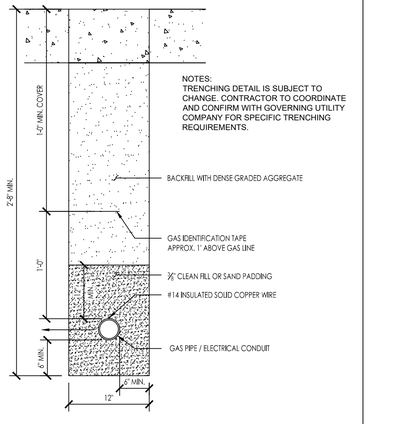
PAVEMENT TIE-IN DETAIL
N.T.S.



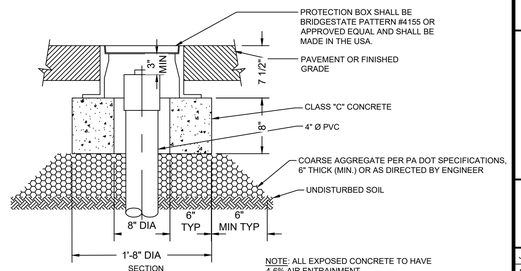
CONCRETE WHEEL STOPS
NTS



WATER TRENCH DETAIL
N.T.S.



GAS / ELECTRIC TRENCH DETAIL
N.T.S.



SANITARY LEADER CLEAN-OUT PROTECTION BOX DETAIL
N.T.S.

CORE STATES INC.
12700 HILLCREST ROAD
Suite 193
Dallas, TX 75230
(214) 377-5060
www.core-eng.com

CLIENT

CHASE

811 Know what's below. Call before you dig.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON DESIGN PLANS AND/OR FIELD LOCATIONS PERFORMED BY OTHERS AND NOT ACTUAL FIELD MEASUREMENTS TAKEN IN THE FIELD. CORE STATES, INC. DOES NOT GUARANTEE THAT LOCATIONS SHOWN ARE EXACT. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES.

REV	DATE	COMMENT	BY
1	4/6/2020	RESUBMISSION TO TOWNSHIP	KGF

DOCUMENT

SITE PLAN APPROVAL FOR CHASE BANK

SITE LOCATION

1574 WOODBURY AVENUE, PORTSMOUTH, NH 03801

ENGINEER SEAL

THOMAS C. PICKERING, P.E.

STATE OF NEW HAMPSHIRE
THOMAS C PICKERING No. 10218 LICENSED PROFESSIONAL ENGINEER
04/06/2020

CORE STATES INC. NH STATE CERTIFICATE OF AUTHORIZATION #01208

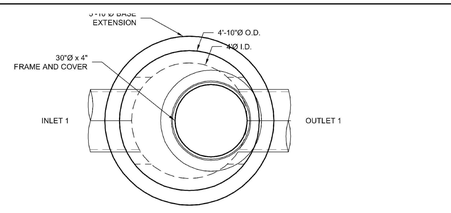
SHEET TITLE

CONSTRUCTION DETAILS

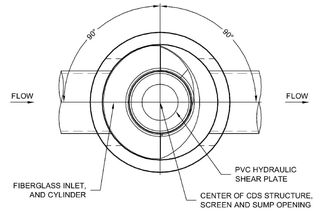
JOB #:	JPM.27086
DATE:	04/03/2020
SCALE:	AS NOTED
DRAWN BY:	DJR
CHECKED BY:	AR

SHEET NO.

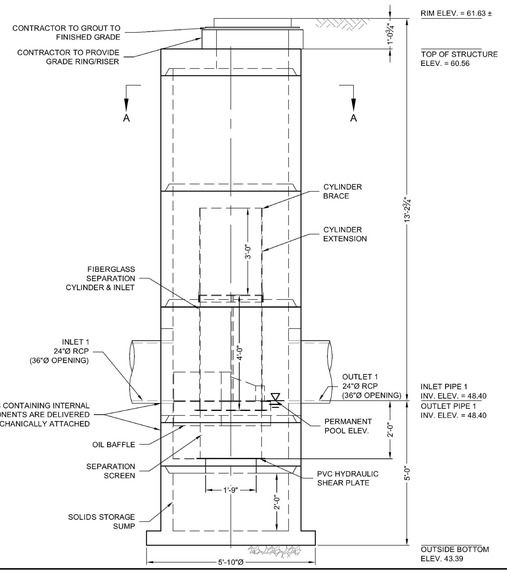
CD-2



PLAN VIEW



SECTION A-A



MATERIAL LIST (PROVIDED BY CONTECH)

COUNT	DESCRIPTION	INSTALLED BY
1	FIBERGLASS INLET AND CYLINDER	CONTECH
1	2400 micron, 2' O.D. x 1.67' SEP. SCREEN	CONTECH
1	CYLINDER EXTENSION	CONTRACTOR
1	CYLINDER BRACE	CONTRACTOR
1	3/16 INCH PVC HYDRAULIC SHEAR PLATE *	CONTECH
1	SEALANT FOR JOINTS	CONTRACTOR
1	30"Ø x 4" FRAME & COVER, EJ#41600484, OR EQUIV.	CONTRACTOR

* SEE HYDRAULIC SHEAR PLATE DETAIL

SITE DESIGN DATA

WATER QUALITY FLOW RATE	0.7 CFS
ESTIMATED PEAK BYPASS FLOW RATE	35 CFS

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. 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.
4. STRUCTURE SHALL MEET AASHTO HS-20 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 M306 AND BE CAST WITH THE CONTECH LOGO.
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. 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.
E. 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.

STRUCTURE WEIGHT
APPROXIMATE HEAVIEST PICK = 5500 LBS.
STRUCTURE IS DELIVERED IN 5 PIECES

MAX FOOTPRINT = Ø5'-10"

CONTECH
CONTRACT
DRAWING

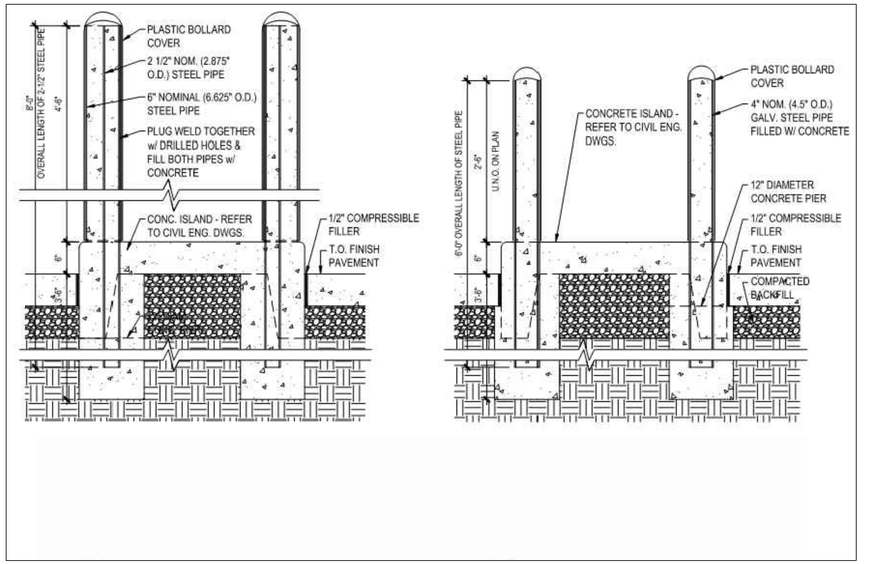
ARRO
LAYOUT 1E
2015-4-FGIS
5756 / 5756

CDS2015-4-C - 645106-10
CHASE BANK - PORTSMOUTH
PORTSMOUTH, NH
for SYSTEM: CDS

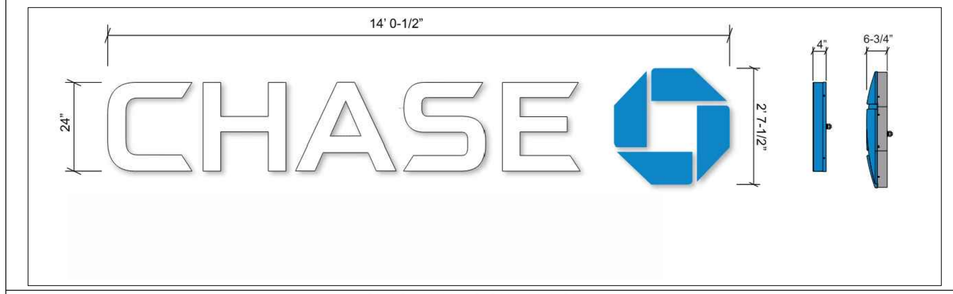
MARK	DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
800.338.1122
9025 Centre Pointe Drive, Suite 400, West Chester, OH 45

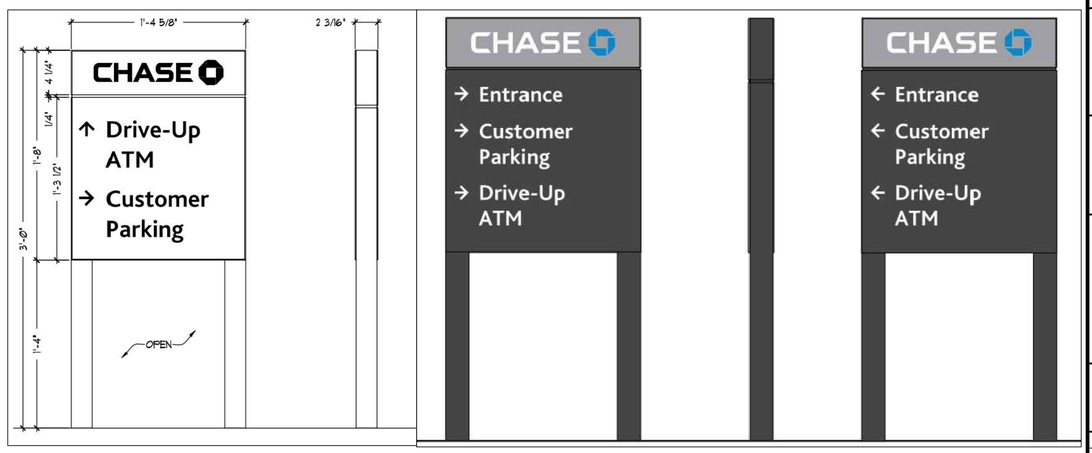
DATE: 04/06/20	SCALE: 3/8" = 1'-0"
DESIGNED: PWV	DRAWN: PWV
CHECKED: ###	APPROVED: ###
PROJECT No.: 645106	SEQUENCE No.: 10
SHEET: 1 OF 1	



DRIVE -UP ISLAND BOLLARD DETAILS
N.T.S.



CHASE WALL SIGN - 36.9 SF
N.T.S.



CHASE DIRECTIONAL SIGN - 2.3 SF
N.T.S.

CORE STATES INC.
12700 HILLCREST ROAD
Suite 193
DALLAS, TX 75230
(214) 377-5060
www.core-eng.com

CLIENT
CHASE

811 Know what's below. Call before you dig.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF UNDERGROUND UTILITIES AND/OR STRUCTURES AS SHOWN ON THE DESIGN DRAWINGS, RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. CORE STATES, INC. DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF SUCH INFORMATION. BEFORE CONTACT THE APPROPRIATE UTILITY COMPANIES AT LEAST 24 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES.

REV	DATE	COMMENT	BY
1	4/6/2020	RESUBMISSION TO TOWNSHIP	KGF

DOCUMENT
SITE PLAN APPROVAL FOR CHASE BANK

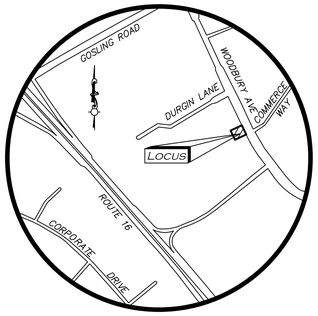
SITE LOCATION
1574 WOODBURY AVENUE, PORTSMOUTH, NH 03801

ENGINEER SEAL
THOMAS C. PICKERING, P.E.
CERTIFICATE NUMBER
THOMAS C PICKERING No. 10218 LICENSED PROFESSIONAL ENGINEER
04/06/2020
CORE STATES (USA) INC. NH STATE CERTIFICATE OF AUTHORIZATION #01208

SHEET TITLE
CONSTRUCTION DETAILS

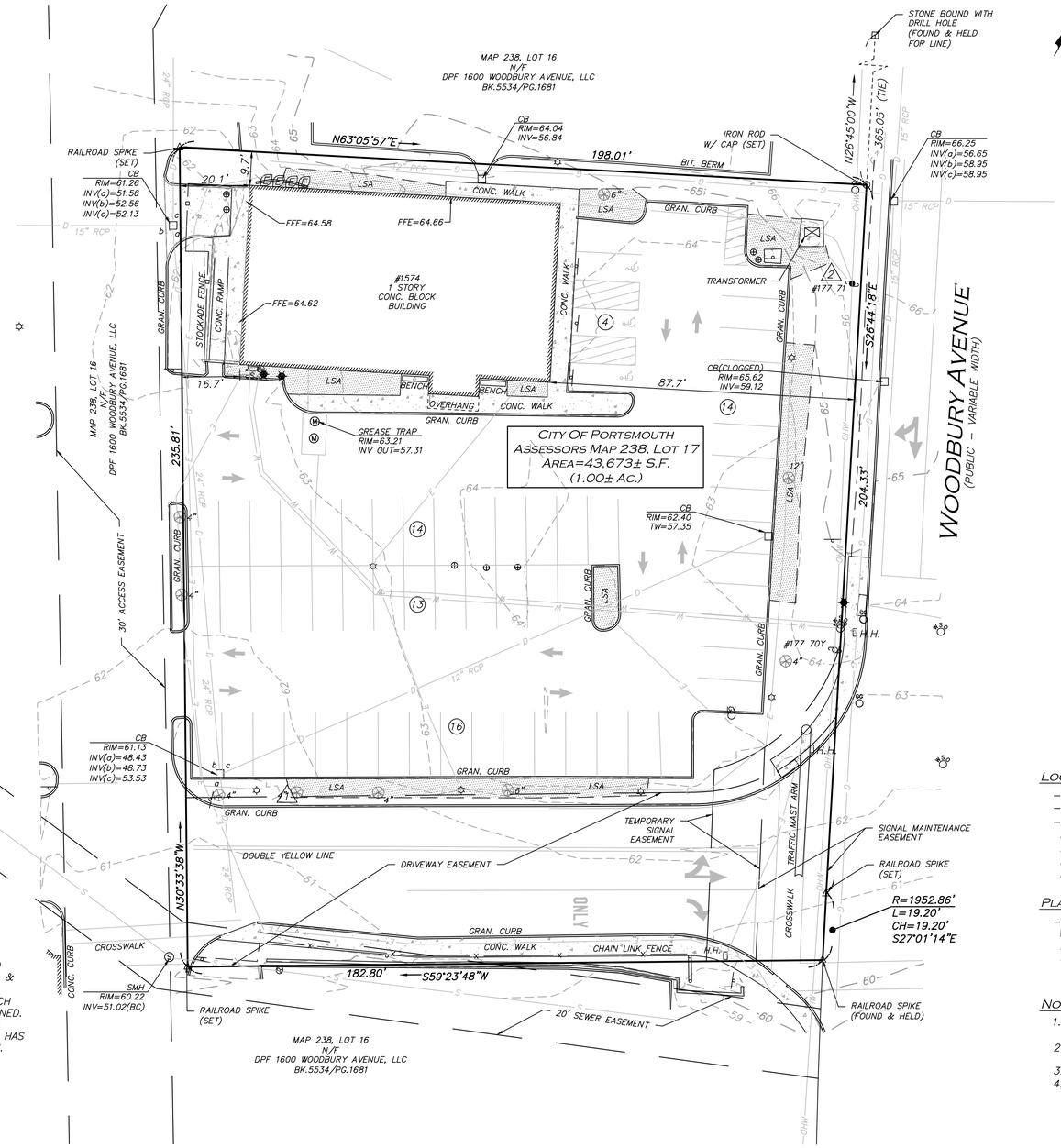
JOB #:	JPM.27086
DATE:	04/03/2020
SCALE:	AS NOTED
DRAWN BY:	DJR
CHECKED BY:	AR

SHEET NO.
CD-3



LOCUS MAP
(NOT TO SCALE)

PARKING SUMMARY	
STANDARD STALLS	58
HANDICAPPED STALLS	3
TOTAL STALLS	61



NEW HAMPSHIRE GRID (NAD 83)

LEGEND

IRON ROD (IR)	○
PK NAIL	△
SEWER MANHOLE (SMH)	Ⓢ
MISC. MANHOLE (MH)	Ⓜ
CATCH BASIN (CB)	□
UTILITY POLE	
UTILITY POLE W/RISER	
WATER GATE	
GAS GATE	
BOLLARD	
LIGHT	
PEDESTRIAN LIGHT	
TREE	
SIGN	
SIGN	
TRANSFORMER	
ELECTRIC METER	E
HANDICAPPED PARKING SPACE	
TRAFFIC MAST	
PAINTED ARROW	
PARKING SPACE COUNT	(16)
FIRE STANDPIPE	
CONCRETE	
LANDSCAPED AREA (LSA)	
BUILDING	
BUILDING OVERHANG	
EASEMENT LINE	
1' CONTOUR	53
5' CONTOUR	55
PROPERTY LINE	
ABUTTERS LINE	
SEWER LINE	S
DRAIN LINE	D
ELECTRIC LINE	E
WATER LINE	W
OVERHEAD WIRES	OHW
FINISHED FLOOR ELEVATION	FFE
BITUMINOUS	BIT.
CONCRETE	CONC.
GRANITE	GRAN.
BOTTOM CENTER	(BC)
REINFORCED CONCRETE PIPE	RCP
POLYVINYL CHLORIDE PIPE	PVC
NOW OR FORMERLY	N/F
BOOK	BK.
PAGE	PG.

UTILITY STATEMENT

THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. ALLEN & MAJOR ASSOCIATES, INC. (A&M) MAKES NO GUARANTEE THAT THE UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. A&M FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. A&M HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

BENCHMARK SUMMARY		
TBM #	DESCRIPTION	ELEV.
1	CHISEL SQUARE ON LIGHT POLE BASE	63.93
2	NAIL SET IN UP# 177 71	68.94

LOCUS REFERENCES

- CITY OF PORTSMOUTH ASSESSORS MAP 238, LOT 17
- R.C.R.D. BOOK 4452, PAGE 881
- PLAN ENTITLED, "LOT LINE RELOCATION PLAN FOR DSP SHOPPING CENTER, LLC., ENDICOTT HOTEL COMPANY & RICHARD P. FUSEGNI WOODBURY AVENUE AND DURGEN LANE COUNTY OF ROCKINGHAM, CITY OF PORTSMOUTH, NH." SCALE 1"=50', PREPARED BY MILLETTE SPRAGUE & COLWELL, INC. DATED JULY 24, 2003, AND ON FILE AT THE R.C.R.D. AS PLAN NO. 32458.

PLAN REFERENCES

- PLAN ENTITLED, "SIGNAL MAINTENANCE EASEMENT FOR PROPERTY AT 1574 WOODBURY AVENUE PORTSMOUTH, ROCKINGHAM COUNTY, NEW HAMPSHIRE, OWNED BY RICHARD P. FUSEGNI", 1"=20', DATED FEBRUARY 16, 2017, NORTH EASTERLY SURVEYING, INC., AND ON FILE AT THE R.C.R.D. AS PLAN NO. 40044.

NOTES

1. NORTH ARROW IS BASED ON NEW HAMPSHIRE GRID COORDINATE SYSTEM (NAD 83).
2. BOOK/PAGE AND PLAN REFERENCES ARE TAKEN FROM ROCKINGHAM COUNTY REGISTRY OF DEEDS IN BRENTWOOD, NH
3. VERTICAL DATUM IS NAVD 88.
4. CONTOUR INTERVAL IS ONE FOOT (1').

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

R:\PROJECTS\2614-05\SURVEY\DRAWINGS\CURRENT\S-2614-05-EC.DWG
FB# NH-13

THIS PLAN IS THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED ON OR BETWEEN JUNE 19, 2019 AND JULY 8, 2019 AND HAD AN ERROR OF CLOSURE OF NO GREATER THAN 1/10,000.

ALLEN & MAJOR ASSOCIATES, INC.

ISSUED FOR REVIEW
AUGUST 28, 2019

JAMES P. SMITH NH LLS #908 DATE

REV	DATE	DESCRIPTION

APPLICANT\OWNER:
CORE STATES GROUP
9 GALEN STREET
WATERTOWN, MA 02472

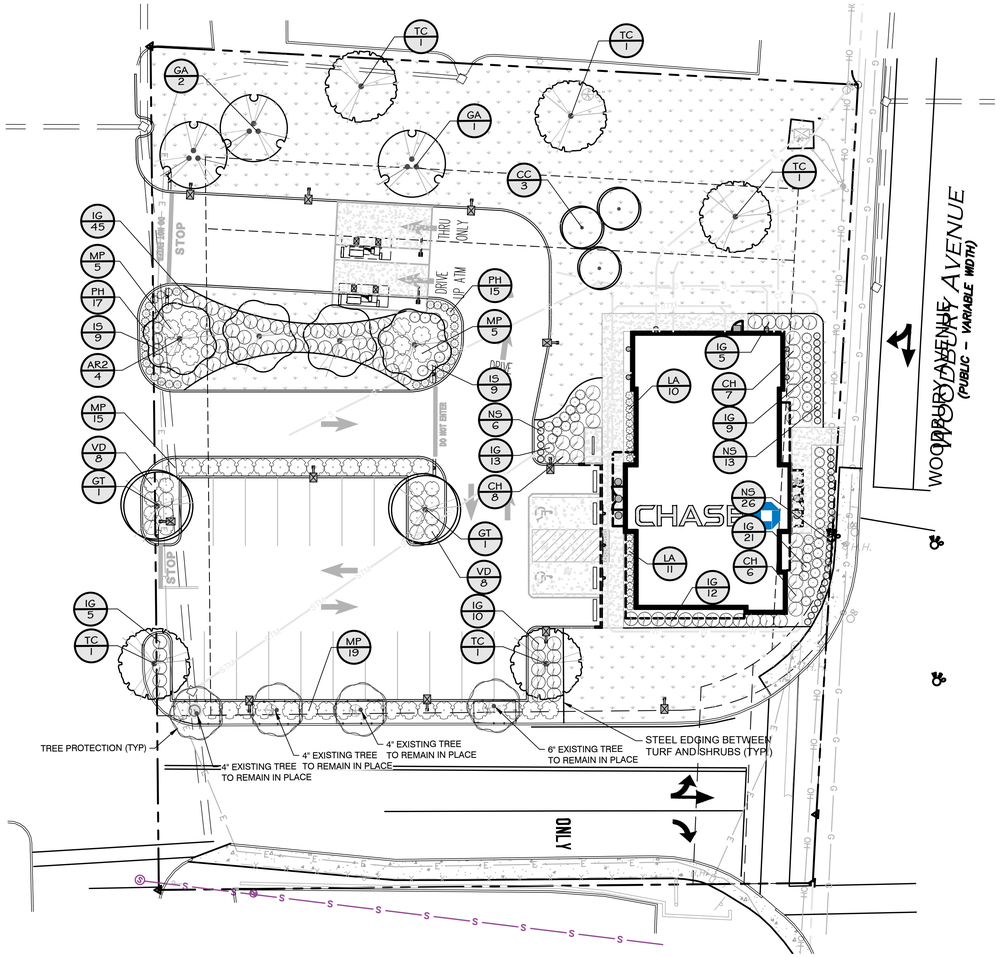
PROJECT:
CHASE BANK SITE
1574 WOODBURY AVENUE
PORTSMOUTH, NH

PROJECT NO.	2614-05	DATE:	8/28/19
SCALE:	1" = 20'	DWG. NAME:	S-2614-05-EC
DRAFTED BY:	AJR	CHECKED BY:	JPS

PREPARED BY:
ALLEN & MAJOR ASSOCIATES, INC.
civil & structural engineering ◆ land surveying
environmental consulting ◆ landscape architecture
www.allenmajor.com
400 HARVEY ROAD
MANCHESTER, NH 03103
TEL: (603) 627-5500
FAX: (603) 627-5501
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

DRAWING TITLE:
EXISTING CONDITIONS

SHEET No.
1



PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	CONTAINER	CAL/DBH	SIZE	QTY
	AR2	Acer rubrum `Red Sunset` Red Sunset Maple	2" Cal.	B&B	8`-10`	4
	CC	Cercis canadensis Eastern Redbud Multi-trunk - 3-5 canes	1.5" Cal.	B&B	6`-8`	3
	GA	Ginkgo biloba `Autumn Gold` TM Autumn Gold Maidenhair Tree	2" Cal.	B&B	8`-10`	3
	GT	Gleditsia triacanthos inermis `Skycole` TM Skyline Thornless Honey Locust	2" Cal.	B&B	8`-10`	2
	TC	Tilia cordata Littleleaf Linden	2" Cal.	B&B	8`-10`	5

SHRUBS	CODE	BOTANICAL / COMMON NAME	CONTAINER	SIZE	SPACIING	QTY
	CH	Clethra alnifolia `Hummingbird` Summersweet	5 gal.			21
	IS	Ilex crenata `Soft Touch` Soft Touch Japanese Holly	3 gal.			18
	IG	Ilex glabra `Shamrock` Inkberry	5 gal.			120
	LA	Lavandula angustifolia English Lavender	3 gal.			21
	MP	Myrica pensylvanica `Bobzam` Bobee Northern Bayberry	5 gal.			44
	NS	Nandina domestica `Sienna Sunrise` Heavenly Bamboo	3 gal.			45
	PH	Pennisetum alopecuroides `Hameln` Hameln Fountain Grass	3 gal.			32
	VD	Viburnum dentatum `Arrowwood` Arrowwood Viburnum	5 gal.			16

GROUND COVERS	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY
	TURF	Poa pratensis Kentucky Bluegrass	sod		13,002 sf

ROOT BARRIERS

THE CONTRACTOR SHALL INSTALL ROOT BARRIERS NEAR ALL NEWLY-PLANTED TREES THAT ARE LOCATED WITHIN FIVE (5) FEET OF PAVING OR CURBS. ROOT BARRIERS SHALL BE "CENTURY" OR "DEEP-ROOT" 24" DEEP PANELS (OR EQUAL). BARRIERS SHALL BE LOCATED IMMEDIATELY ADJACENT TO HARDSCAPE. INSTALL PANELS PER MANUFACTURER'S RECOMMENDATIONS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR USE ROOT BARRIERS OF A TYPE THAT COMPLETELY ENCIRCLE THE ROOTBALL.

MULCHES

AFTER ALL PLANTING IS COMPLETE, CONTRACTOR SHALL INSTALL 3" THICK LAYER OF 1-1/2" SHREDDED WOOD MULCH, NATURAL (UNDYED), OVER LANDSCAPE FABRIC IN ALL PLANTING AREAS (EXCEPT FOR TURF AND SEEDED AREAS). CONTRACTOR SHALL SUBMIT SAMPLES OF ALL MULCHES TO LANDSCAPE ARCHITECT AND OWNER FOR APPROVAL PRIOR TO CONSTRUCTION. ABSOLUTELY NO EXPOSED GROUND SHALL BE LEFT SHOWING ANYWHERE ON THE PROJECT AFTER MULCH HAS BEEN INSTALLED (SUBJECT TO THE CONDITIONS AND REQUIREMENTS OF THE "GENERAL GRADING AND PLANTING NOTES" AND SPECIFICATIONS).

GENERAL GRADING AND PLANTING NOTES

1. BY SUBMITTING A PROPOSAL FOR THE LANDSCAPE PLANTING SCOPE OF WORK, THE CONTRACTOR CONFIRMS THAT HE HAS READ, AND WILL COMPLY WITH, THE ASSOCIATED NOTES, SPECIFICATIONS, AND DETAILS WITH THIS PROJECT.
2. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL EXISTING VEGETATION (EXCEPT WHERE NOTED TO REMAIN).
3. IN THE CONTEXT OF THESE PLANS, NOTES, AND SPECIFICATIONS, "FINISH GRADE" REFERS TO THE FINAL ELEVATION OF THE SOIL SURFACE (NOT TOP OF MULCH) AS INDICATED ON THE GRADING PLANS.
   a. BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE ROUGH GRADES OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1' OF FINISH GRADE. SEE SPECIFICATIONS FOR MORE DETAILED INSTRUCTION ON TURF AREA AND PLANTING BED PREPARATION.
   b. CONSTRUCT AND MAINTAIN FINISH GRADES AS SHOWN ON GRADING PLANS, AND CONSTRUCT AND MAINTAIN SLOPES AS RECOMMENDED BY THE GEOTECHNICAL REPORT. ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE AWAY FROM STRUCTURES AT THE MINIMUM SLOPE SPECIFIED IN THE REPORT AND ON THE GRADING PLANS, AND AREAS OF POTENTIAL PONDING SHALL BE REGRADED TO BLEND IN WITH THE SURROUNDING GRADES AND ELIMINATE PONDING POTENTIAL.
   c. THE LANDSCAPE CONTRACTOR SHALL DETERMINE WHETHER OR NOT THE EXPORT OF ANY SOIL WILL BE NEEDED, TAKING INTO ACCOUNT THE ROUGH GRADE PROVIDED, THE AMOUNT OF SOIL AMENDMENTS TO BE ADDED (**BASED ON A SOIL TEST**, PER SPECIFICATIONS), AND THE FINISH GRADES TO BE ESTABLISHED.
   d. ENSURE THAT THE FINISH GRADE IN SHRUB AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 3" BELOW THE ADJACENT FINISH SURFACE, IN ORDER TO ALLOW FOR PROPER MULCH DEPTH. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.
   e. ENSURE THAT THE FINISH GRADE IN TURF AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 1" BELOW THE FINISH SURFACE OF THE WALKS. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.
   f. SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GRADING PLANS, GEOTECHNICAL REPORT, THESE NOTES AND PLANS, AND ACTUAL CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY BRING SUCH ITEMS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT, GENERAL CONTRACTOR, AND OWNER.
4. ALL PLANT LOCATIONS ARE DIAGRAMMATIC. ACTUAL LOCATIONS SHALL BE VERIFIED WITH THE LANDSCAPE ARCHITECT OR DESIGNER PRIOR TO PLANTING. THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT ALL REQUIREMENTS OF THE PERMITTING AUTHORITY ARE MET (I.E., MINIMUM PLANT QUANTITIES, PLANTING METHODS, TREE PROTECTION METHODS, ETC.).
   a. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR DETERMINING PLANT QUANTITIES; PLANT QUANTITIES SHOWN ON LEGENDS AND CALLOUTS ARE FOR GENERAL INFORMATION ONLY. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLAN AND THE PLANT LEGEND, THE PLANT QUANTITY AS SHOWN ON THE PLAN (FOR INDIVIDUAL SYMBOLS) OR CALLOUT (FOR GROUNDCOVER PATTERNS) SHALL TAKE PRECEDENCE.
   b. **NO SUBSTITUTIONS OF PLANT MATERIALS SHALL BE ALLOWED WITHOUT THE WRITTEN PERMISSION OF THE LANDSCAPE ARCHITECT**, IF SOME OF THE PLANTS ARE NOT AVAILABLE, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING (VIA PROPER CHANNELS).
   c. THE CONTRACTOR SHALL, AT A MINIMUM, PROVIDE REPRESENTATIVE PHOTOS OF ALL PLANTS PROPOSED FOR THE PROJECT. THE CONTRACTOR SHALL ALLOW THE LANDSCAPE ARCHITECT AND THE OWNER/OWNER'S REPRESENTATIVE TO INSPECT, AND APPROVE OR REJECT, ALL PLANTS DELIVERED TO THE JOBSITE. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR SUBMITTALS.
5. THE CONTRACTOR SHALL MAINTAIN THE LANDSCAPE IN A HEALTHY CONDITION FOR 90 DAYS AFTER ACCEPTANCE BY THE OWNER. REFER TO SPECIFICATIONS FOR CONDITIONS OF ACCEPTANCE FOR THE START OF THE MAINTENANCE PERIOD, AND FOR FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD.
6. SEE SPECIFICATIONS AND DETAILS FOR FURTHER REQUIREMENTS.

0' 10' 20' 40'

Scale 1" = 20'

EVERGREEN DESIGN GROUP
(800) 680-6630
1200 US Highway 22 E Suite 2000-2248
Bridgewater, NJ 08807
www.EvergreenDesignGroup.com

CORE STATES INC.
CORESTATES, INC.
RHODE ISLAND
ELEVEN MILE
CERTIFICATE OF AUTHORIZATION
No. PE.0003841-COA
12700 HILLCREST ROAD
Suite 192
DALLAS, TX 75230
(214) 377-5060
www.core-eng.com

CLIENT

CHASE

811 Know what's below. Call before you dig.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON DESIGN DRAWINGS AND/OR FIELD MEASUREMENTS AND MAY NOT REFLECT ACTUAL FIELD MEASUREMENTS TAKEN IN THE FIELD. CORE STATES, INC. DOES NOT GUARANTEE THAT LOCATIONS SHOWN ARE EXACT. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES 48 HOURS (2 WORKING DAYS) BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES.

REV	DATE	COMMENT	BY

DOCUMENT

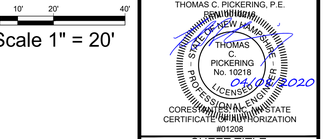
SITE PLAN APPROVAL FOR CHASE BANK

SITE LOCATION

1574 WOODBURY AVENUE,
PORTSMOUTH, NH 03801

ENGINEER SEAL

THOMAS C. PICKERING, P.E.



CORESTATES, INC. RHODE ISLAND STATE CERTIFICATE OF AUTHORIZATION #01208

SHEET TITLE

LANDSCAPE PLANTING

JOB #:	JPM.27086
DATE:	04/08/2020
SCALE:	
DRAWN BY:	EMS
CHECKED BY:	RM

SHEET NO.

LP-1

PLANTING SPECIFICATIONS

GENERAL

A. QUALIFICATIONS OF LANDSCAPE CONTRACTOR
   1. ALL LANDSCAPE WORK SHOWN ON THESE PLANS SHALL BE PERFORMED BY A SINGLE FIRM SPECIALIZING IN LANDSCAPE PLANTING.
   2. A LIST OF SUCCESSFULLY COMPLETED PROJECTS OF THIS TYPE, SIZE AND NATURE MAY BE REQUESTED BY THE OWNER FOR FURTHER QUALIFICATION MEASURES.
   3. THE LANDSCAPE CONTRACTOR SHALL HOLD A VALID NURSERY AND FLORAL CERTIFICATE ISSUED BY THE TEXAS DEPARTMENT OF AGRICULTURE, AS WELL AS OPERATE UNDER A COMMERCIAL PESTICIDE APPLICATOR LICENSE ISSUED BY EITHER THE TEXAS DEPARTMENT OF AGRICULTURE OR THE TEXAS STRUCTURAL PEST CONTROL BOARD.

B. SCOPE OF WORK
   1. WORK COVERED BY THESE SECTIONS INCLUDES THE FURNISHING AND PAYMENT OF ALL MATERIALS, LABOR, SERVICES, EQUIPMENT, LICENSES, TAXES AND ANY OTHER ITEMS THAT ARE NECESSARY FOR THE EXECUTION, INSTALLATION AND COMPLETION OF ALL WORK, SPECIFIED HEREIN AND / OR SHOWN ON THE LANDSCAPE PLANS, NOTES, AND DETAILS.
   2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER SUCH WORK, INCLUDING ALL INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLY, TRANSPORTATION AND INSTALLATION OF MATERIALS.
   3. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES (WATER, SEWER, ELECTRICAL, TELEPHONE, GAS, CABLE, TELEVISION, ETC.) PRIOR TO THE START OF ANY WORK.

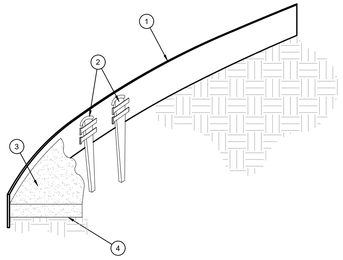
PRODUCTS

A. ALL MANUFACTURED PRODUCTS SHALL BE NEW.
B. CONTAINER AND BALLED-AND-BURLAPPED PLANTS:
   1. FURNISH NURSERY-GROWN PLANTS COMPLYING WITH ANSI Z60.1-2014. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT. ALL PLANTS WITHIN A SPECIES SHALL HAVE SIMILAR SIZE, AND SHALL BE OF A FORM TYPICAL FOR THE SPECIES. ALL TREES SHALL BE OBTAINED FROM SOURCES WITHIN 200 MILES OF THE PROJECT SITE, AND WITH SIMILAR CLIMACTIC CONDITIONS.
   2. ROOT SYSTEMS SHALL BE HEALTHY, DENSELY BRANCHED ROOT SYSTEMS, NON-POT-BOUND, FREE FROM ENCIRCLING AND/OR GIRDLING ROOTS, AND FREE FROM ANY OTHER ROOT DEFECTS (SUCH AS J-SHAPED ROOTS).
   3. TREES MAY BE PLANTED FROM CONTAINERS OR BALLED-AND-BURLAPPED (B&B), UNLESS SPECIFIED ON THE PLANTING LEGEND. BARE-ROOT TREES ARE NOT ACCEPTABLE.
   4. ANY PLANT DEEMED UNACCEPTABLE BY THE LANDSCAPE ARCHITECT OR OWNER SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND SHALL BE REPLACED WITH AN ACCEPTIBLE PLANT OF LIKE TYPE AND SIZE AT THE CONTRACTOR'S OWN EXPENSE. ANY PLANTS APPEARING TO BE UNHEALTHY, EVEN IF DETERMINED TO STILL BE ALIVE, SHALL NOT BE ACCEPTED. THE LANDSCAPE ARCHITECT AND OWNER SHALL BE THE SOLE JUDGES AS TO THE ACCEPTABILITY OF PLANT MATERIAL.
   5. ALL TREES SHALL BE STANDARD IN FORM, UNLESS OTHERWISE SPECIFIED. TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED. PRUNE ALL DAMAGED TWIGS AFTER PLANTING.
   6. CALIPER MEASUREMENTS FOR STANDARD (SINGLE TRUNK) TREES SHALL BE AS FOLLOWS: SIX INCHES ABOVE THE ROOT FLARE FOR TREES UP TO AND INCLUDING FOUR INCHES IN CALIPER, AND TWELVE INCHES ABOVE THE ROOT FLARE FOR TREES EXCEEDING FOUR INCHES IN CALIPER.
   7. MULTI-TRUNK TREES SHALL BE MEASURED BY THEIR OVERALL HEIGHT, MEASURED FROM THE TOP OF THE ROOT BALL. WHERE CALIPER MEASUREMENTS ARE USED, THE CALIPER SHALL BE CALCULATED AS ONE-HALF OF THE SUM OF THE CALIPER OF THE THREE LARGEST TRUNKS.
   8. ANY TREE OR SHRUB SHOWN TO HAVE EXCESS SOIL PLACED ON TOP OF THE ROOT BALL, SO THAT THE ROOT FLARE HAS BEEN COMPLETELY COVERED, SHALL BE REJECTED.
C. SOD: PROVIDE WELL-ROOTED SOD OF THE VARIETY NOTED ON THE PLANS. SOD SHALL BE CUT FROM HEALTHY, MATURE TURF WITH SOIL THICKNESS OF 3/4" TO 1". EACH PALLET OF SOD SHALL BE ACCOMPANIED BY A CERTIFICATE FROM SUPPLIER STATING THE COMPOSITION OF THE SOD.
D. TOPSOIL: SANDY TO CLAY LOAM TOPSOIL, FREE OF STONES LARGER THAN ½ INCH, FOREIGN MATTER, PLANTS, ROOTS, AND SEEDS.
E. COMPOST: WELL-COMPOSTED, STABLE, AND WEED-FREE ORGANIC MATTER, pH RANGE OF 5.5 TO 8; MOISTURE CONTENT 35 TO 55 PERCENT BY WEIGHT; 100 PERCENT PASSING THROUGH 3/4-INCH SIEVE; SOLUBLE SALT CONTENT OF 5 TO 10 DECISIEMENS/M; NOT EXCEEDING 0.5 PERCENT INERT CONTAMINANTS AND FREE OF SUBSTANCES TOXIC TO PLANTINGS. NO MANURE OR ANIMAL-BASED PRODUCTS SHALL BE USED.
F. FERTILIZER: GRANULAR FERTILIZER CONSISTING OF NITROGEN, PHOSPHORUS, POTASSIUM, AND OTHER NUTRIENTS IN PROPORTIONS, AMOUNTS, AND RELEASE RATES RECOMMENDED IN A SOIL REPORT FROM A QUALIFIED SOIL-TESTING AGENCY (SEE BELOW).
G. MULCH: SIZE AND TYPE AS INDICATED ON PLANS, FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS A TOP DRESSING OF TREES AND SHRUBS.
H. TREE STAKING AND GUYING
   1. STAKES: 6' LONG GREEN METAL T-POSTS.
   2. GUY AND TIE WIRE: ASTM A 641, CLASS 1, GALVANIZED-STEEL WIRE, 2-STRAND, TWISTED, 0.106 INCH DIAMETER.
   3. STRAP CHAFING GUARD: REINFORCED NYLON OR CANVAS AT LEAST 1-1/2 INCH WIDE, WITH GROMMETS TO PROTECT TREE TRUNKS FROM DAMAGE.
L. STEEL EDGING: PROFESSIONAL STEEL EDGING, 14 GAUGE THICK X 4 INCHES WIDE, FACTORY PAINTED DARK GREEN. ACCEPTABLE MANUFACTURERS INCLUDE COL-MET OR APPROVED EQUAL.
M. PRE-EMERGENT HERBICIDES: ANY GRANULAR, NON-STAINING PRE-EMERGENT HERBICIDE THAT IS LABELED FOR THE SPECIFIC ORNAMENTALS OR TURF ON WHICH IT WILL BE UTILIZED. PRE-EMERGENT HERBICIDES SHALL BE APPLIED PER THE MANUFACTURER'S LABELED RATES.

METHODS

A. SOIL PREPARATION
   1. BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE GRADE OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1' OF FINISH GRADE. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY SHOULD ANY DISCREPANCIES EXIST.
   2. SOIL TESTING:
      a. AFTER FINISH GRADES HAVE BEEN ESTABLISHED, CONTRACTOR SHALL HAVE SOIL SAMPLES FROM THE PROJECT'S LANDSCAPE AREAS TESTED BY AN ESTABLISHED SOIL TESTING LABORATORY. EACH SAMPLE SUBMITTED TO THE LAB SHALL CONTAIN NO LESS THAN ONE QUART OF SOIL, TAKEN FROM BETWEEN THE SOIL SURFACE AND 6" DEPTH. IF NO SAMPLE LOCATIONS ARE INDICATED ON THE PLANS, THE CONTRACTOR SHALL TAKE A MINIMUM OF THREE SAMPLES FROM VARIOUS REPRESENTATIVE LOCATIONS FOR TESTING.
      b. THE CONTRACTOR SHALL HAVE THE SOIL TESTING LABORATORY PROVIDE RESULTS FOR THE FOLLOWING: SOIL TEXTURAL CLASS, GENERAL SOIL FERTILITY, pH, ORGANIC MATTER CONTENT, SALT (CEC), LIME, SODIUM ADSORPTION RATIO (SAR) AND BORON CONTENT.
      c. THE CONTRACTOR SHALL ALSO SUBMIT THE PROJECT'S PLANT LIST TO THE LABORATORY ALONG WITH THE SOIL SAMPLES.
      d. THE SOIL REPORT PRODUCED BY THE LABORATORY SHALL CONTAIN RECOMMENDATIONS FOR THE FOLLOWING (AS APPROPRIATE): SEPARATE SOIL PREPARATION AND BACKFILL MIX RECOMMENDATIONS FOR GENERAL ORNAMENTAL PLANTS, XERIC PLANTS, TURF, AND NATIVE SEED, AS WELL AS PRE-PLANT FERTILIZER APPLICATIONS AND RECOMMENDATIONS FOR ANY OTHER SOIL RELATED ISSUES. THE REPORT SHALL ALSO PROVIDE A FERTILIZER PROGRAM FOR THE ESTABLISHMENT PERIOD AND FOR LONG-TERM MAINTENANCE.
   3. THE CONTRACTOR SHALL INSTALL SOIL AMENDMENTS AND FERTILIZERS PER THE SOILS REPORT RECOMMENDATIONS. ANY CHANGE IN COST DUE TO THE SOIL REPORT RECOMMENDATIONS, EITHER INCREASE OR DECREASE, SHALL BE SUBMITTED TO THE OWNER WITH THE REPORT.
   4. FOR BIDDING PURPOSES ONLY, THE SOIL PREPARATION SHALL CONSIST OF THE FOLLOWING:
      a. TURF: INCORPORATE THE FOLLOWING AMENDMENTS INTO THE TOP 8" OF SOIL BY MEANS OF ROTOTILLING AFTER CROSS-RIPPING:
      i. NITROGEN STABILIZED ORGANIC AMENDMENT - 4 CU. YDS. PER 1,000 S.F.
      ii. PREPLANT TURF FERTILIZER (10-20-10 OR SIMILAR, SLOW RELEASE, ORGANIC) - 15 LBS PER 1,000 S.F.
      iii. "CLAY BUSTER" OR EQUAL - USE MANUFACTURER'S RECOMMENDED RATE
      b. TREES, SHRUBS, AND PERENNIALS: INCORPORATE THE FOLLOWING AMENDMENTS INTO THE TOP 8" OF SOIL BY MEANS OF ROTOTILLING AFTER CROSS-RIPPING:
      i. NITROGEN STABILIZED ORGANIC AMENDMENT - 4 CU. YDS. PER 1,000 S.F.
      ii. 12-12-12 FERTILIZER (OR SIMILAR, ORGANIC, SLOW RELEASE) - 10 LBS. PER CU. YD.
      iii. "CLAY BUSTER" OR EQUAL - USE MANUFACTURER'S RECOMMENDED RATE
      iv. IRON SULPHATE - 2 LBS. PER CU. YD.
   5. IN THE CONTEXT OF THESE PLANS, NOTES, AND SPECIFICATIONS, "FINISH GRADE" REFERS TO THE FINAL ELEVATION OF THE SOIL SURFACE (NOT TOP OF MULCH) AS INDICATED ON THE GRADING PLANS.
      a. BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE ROUGH GRADES OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1' OF FINISH GRADE. SEE SPECIFICATIONS FOR MORE DETAILED INSTRUCTION ON TURF AREA AND PLANTING BED PREPARATION.
      b. CONSTRUCT AND MAINTAIN FINISH GRADES AS SHOWN ON GRADING PLANS, AND CONSTRUCT AND MAINTAIN SLOPES AS RECOMMENDED BY THE GEOTECHNICAL REPORT. ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE AWAY FROM STRUCTURES AT THE MINIMUM SLOPE SPECIFIED IN THE REPORT AND ON THE GRADING PLANS, AND AREAS OF POTENTIAL PONDING SHALL BE REGRADED TO BLEND IN WITH THE SURROUNDING GRADES AND ELIMINATE PONDING POTENTIAL.
      c. THE LANDSCAPE CONTRACTOR SHALL DETERMINE WHETHER OR NOT THE EXPORT OF ANY SOIL WILL BE NEEDED, TAKING INTO ACCOUNT THE ROUGH GRADE PROVIDED, THE AMOUNT OF SOIL AMENDMENTS TO BE ADDED (**BASED ON A SOIL TEST**, PER SPECIFICATIONS), AND THE FINISH GRADES TO BE ESTABLISHED.
      d. ENSURE THAT THE FINISH GRADE IN SHRUB AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 3" BELOW THE ADJACENT FINISH SURFACE. IN ORDER TO ALLOW FOR PROPER MULCH DEPTH. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.
      e. ENSURE THAT THE FINISH GRADE IN TURF AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 1" BELOW THE FINISH SURFACE OF THE WALKS. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.
      f. SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GRADING PLANS, GEOTECHNICAL REPORT, THESE NOTES AND PLANS, AND ACTUAL CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY BRING SUCH ITEMS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT, GENERAL CONTRACTOR, AND OWNER.
   6. ONCE SOIL PREPARATION IS COMPLETE, THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT THERE ARE NO DEBRIS, TRASH, OR STONES LARGER THAN 1" REMAINING IN THE TOP 6" OF SOIL.

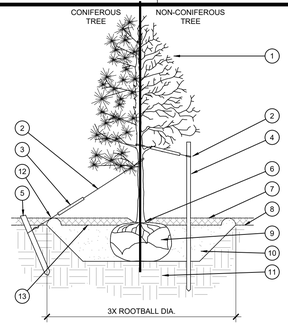
B. SUBMITTALS
   1. THE CONTRACTOR SHALL PROVIDE SUBMITTALS AND SAMPLES, IF REQUIRED, TO THE LANDSCAPE ARCHITECT, AND RECEIVE APPROVAL IN WRITING FOR SUCH SUBMITTALS BEFORE WORK COMMENCES.
   2. SUBMITTALS SHALL INCLUDE PHOTOS OF PLANTS WITH A RULER OR MEASURING STICK FOR SCALE, PHOTOS OR SAMPLES OF ANY REQUIRED MULCHES, AND SOIL TEST RESULTS AND PREPARATION RECOMMENDATIONS FROM THE TESTING LAB (INCLUDING COMPOST AND FERTILIZER RATES AND TYPES, AND OTHER AMENDMENTS FOR TREE/SHRUB, TURF, AND SEED AREAS AS MAY BE APPROPRIATE).
   3. SUBMITTALS SHALL ALSO INCLUDE MANUFACTURER CUT SHEETS FOR PLANTING ACCESSORIES SUCH AS TREE STAKES AND TIES, EDGING, AND LANDSCAPE FABRICS (IF ANY).
   4. WHERE MULTIPLE ITEMS ARE SHOWN ON A PAGE, THE CONTRACTOR SHALL CLEARLY INDICATE THE ITEM BEING CONSIDERED.
C. GENERAL PLANTING
   1. REMOVE ALL NURSERY TAGS AND STAKES FROM PLANTS.
   2. EXCEPT IN AREAS TO BE PLANTED WITH ORNAMENTAL GRASSES, APPLY PRE-EMERGENT HERBICIDES AT THE MANUFACTURER'S RECOMMENDED RATE.
   3. TRENCHING NEAR EXISTING TREES:
      a. CONTRACTOR SHALL NOT DISTURB ROOTS 1-1/2" AND LARGER IN DIAMETER WITHIN THE CRITICAL ROOT ZONE (CRZ) OF EXISTING TREES, AND SHALL EXERCISE ALL POSSIBLE CARE AND PRECAUTIONS TO AVOID INJURY TO TREE ROOTS, TRUNKS, AND BRANCHES. THE CRZ IS DEFINED AS A CIRCULAR AREA EXTENDING OUTWARD FROM THE TREE TRUNK, WITH A RADIUS EQUAL TO 1' FOR EVERY 1" OF TRUNK DIAMETER-AT-BREAST-HEIGHT (4.5' ABOVE THE AVERAGE GRADE AT THE TRUNK).
      b. ALL EXCAVATION WITHIN THE CRZ SHALL BE PERFORMED USING HAND TOOLS. NO MACHINE EXCAVATION OR TRENCHING OF ANY KIND SHALL BE ALLOWED WITHIN THE CRZ.
      c. ALTER ALIGNMENT OF PIPE TO AVOID TREE ROOTS 1-1/2" AND LARGER IN DIAMETER. WHERE TREE ROOTS 1-1/2" AND LARGER IN DIAMETER ARE ENCOUNTERED IN THE FIELD, TUNNEL UNDER SUCH ROOTS. WRAP EXPOSED ROOTS WITH SEVERAL LAYERS OF BURLAP AND KEEP MOIST. CLOSE ALL TRENCHES WITHIN THE CANOPY DRIP LINES WITHIN 24 HOURS.
      d. ALL SEVERED ROOTS SHALL BE HAND PRUNED WITH SHARP TOOLS AND ALLOWED TO AIR-DRY. DO NOT USE ANY SORT OF SEALERS OR WOUND PAINTS.
C. TREE PLANTING
   1. TREE PLANTING HOLES SHALL BE EXCAVATED TO MINIMUM WIDTH OF TWO TIMES THE WIDTH OF THE ROOTBALL AND TO A DEPTH EQUAL TO THE DEPTH OF THE ROOTBALL LESS TWO TO FOUR INCHES.
   2. SCARIFY THE SIDES AND BOTTOM OF THE PLANTING HOLE PRIOR TO THE PLACEMENT OF THE TREE. REMOVE ANY GLAZING THAT MAY HAVE BEEN CAUSED DURING THE EXCAVATION OF THE HOLE.
   3. FOR CONTAINER AND BOX TREES, TO REMOVE ANY POTENTIALLY GIRDLING ROOTS AND OTHER ROOT DEFECTS, THE CONTRACTOR SHALL SHAVE A 1" LAYER OFF OF THE SIDES AND BOTTOM OF THE ROOTBALL OF ALL TREES JUST BEFORE PLACING INTO THE PLANTING PIT. DO NOT "TEASE" ROOTS OUT FROM THE ROOTBALL.
   4. INSTALL THE TREE ON UNDISTURBED SUBGRADE SO THAT THE TOP OF THE ROOTBALL IS TWO TO FOUR INCHES ABOVE THE SURROUNDING GRADE.
   5. BACKFILL THE TREE HOLE UTILIZING THE EXISTING TOPSOIL FROM ON-SITE. ROCKS LARGER THAN 1" DIA. AND ALL OTHER DEBRIS SHALL BE REMOVED FROM THE SOIL PRIOR TO THE BACKFILL. SHOULD ADDITIONAL SOIL BE REQUIRED TO ACCOMPLISH THIS TASK, USE STORED TOPSOIL FROM ON-SITE OR IMPORT ADDITIONAL TOPSOIL FROM OFF-SITE AT NO ADDITIONAL COST TO THE OWNER. IMPORTED TOPSOIL SHALL BE OF SIMILAR TEXTURAL CLASS AND COMPOSITION IN THE ON-SITE SOIL.
   6. TREES SHALL NOT BE STAKED UNLESS LOCAL CONDITIONS (SUCH AS HEAVY WINDS OR SLOPES) REQUIRE STAKES TO KEEP TREES UPRIGHT. SHOULD STAKING BE REQUIRED, THE TOTAL NUMBER OF TREE STAKES (BEYOND THE MINIMUMS LISTED BELOW) WILL BE LEFT TO THE LANDSCAPE CONTRACTOR'S DISCRETION. SHOULD ANY TREES FALL OR LEAN, THE LANDSCAPE CONTRACTOR SHALL STRAIGHTEN THE TREE, OR REPLACE IT SHOULD IT BECOME DAMAGED. TREE STAKING SHALL ADHERE TO THE FOLLOWING GUIDELINES:
      a. 1"-2" TREES — TWO STAKES PER TREE
      b. 2-1/2"-4" TREES — THREE STAKES PER TREE
      c. TREES OVER 4" CALIPER — GUY AS NEEDED
      d. MULTI-TRUNK TREES — THREE STAKES PER TREE MINIMUM, QUANTITY AND POSITIONS AS NEEDED TO STABILIZE THE TREE
      e. MULTI-TRUNK TREES — THREE STAKES PER TREE MINIMUM, QUANTITY AND POSITIONS AS NEEDED TO STABILIZE THE TREE
   7. UPON COMPLETION OF PLANTING, CONSTRUCT AN EARTH WATERING BASIN AROUND THE TREE. COVER THE INTERIOR OF THE TREE RING WITH THE WEED BARRIER CLOTH AND TOPDRESS WITH MULCH (TYPE AND DEPTH PER PLANS).
D. SHRUB, PERENNIAL, AND GROUNDCOVER PLANTING
   1. DIG THE PLANTING HOLES TWICE AS WIDE AND 2" LESS DEEP THAN EACH PLANT'S ROOTBALL. INSTALL THE PLANT IN THE HOLE. BACKFILL AROUND THE PLANT WITH SOIL AMENDED PER SOIL TEST RECOMMENDATIONS.
   2. INSTALL THE WEED BARRIER CLOTH, OVERLAPPING IT AT THE ENDS. UTILIZE STEEL STAPLES TO KEEP THE WEED BARRIER CLOTH IN PLACE.
   3. WHEN PLANTING IS COMPLETE, INSTALL MULCH (TYPE AND DEPTH PER PLANS) OVER ALL PLANTING BEDS, COVERING THE ENTIRE PLANTING AREA.
E. SODDING
   1. SOD VARIETY TO BE AS SPECIFIED ON THE LANDSCAPE PLAN.
   2. LAY SOD WITHIN 24 HOURS FROM THE TIME OF STRIPPING. DO NOT LAY IF THE GROUND IS FROZEN.
   3. LAY THE SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. BUTT ENDS AND SIDES OF SOD STRIPS - DO NOT OVERLAP. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES.
   4. ROLL THE SOD TO ENSURE GOOD CONTACT OF THE SOD'S ROOT SYSTEM WITH THE SOIL UNDERNEATH.
   5. WATER THE SOD THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER PLANTING TO OBTAIN AT LEAST SIX INCHES OF PENETRATION INTO THE SOIL BELOW THE SOD.
F. MULCH
   1. INSTALL MULCH TOPDRESSING, TYPE AND DEPTH PER MULCH NOTE, IN ALL PLANTING AREAS AND TREE RINGS.
   2. DO NOT INSTALL MULCH WITHIN 6" OF TREE ROOT FLARE AND WITHIN 24" OF HABITABLE STRUCTURES, EXCEPT AS MAY BE NOTED ON THESE PLANS. MULCH COVER WITHIN 6" OF CONCRETE WALKS AND CURBS SHALL NOT PROTRUDE ABOVE THE FINISH SURFACE OF THE WALKS AND CURBS. MULCH COVER WITHIN 12" OF WALLS SHALL BE AT LEAST 3" LOWER THAN THE TOP OF WALL.
G. CLEAN UP
   1. DURING LANDSCAPE PREPARATION AND PLANTING, KEEP ALL PAVEMENT CLEAN AND ALL WORK AREAS IN A NEAT, ORDERLY CONDITION.
   2. DISPOSED LEGALLY OF ALL EXCAVATED MATERIALS OFF THE PROJECT SITE.
H. INSPECTION AND ACCEPTANCE
   1. UPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE SITE CLEAN, FREE OF DEBRIS AND TRASH, AND SUITABLE FOR USE AS INTENDED. THE LANDSCAPE CONTRACTOR SHALL THEN REQUEST AN INSPECTION BY THE OWNER TO DETERMINE FINAL ACCEPTABILITY.
   2. WHEN THE INSPECTED PLANTING WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, THE LANDSCAPE CONTRACTOR SHALL REPLACE AND/OR REPAIR THE REJECTED WORK TO THE OWNER'S SATISFACTION WITHIN 24 HOURS.
   3. THE LANDSCAPE MAINTENANCE PERIOD WILL NOT COMMENCE UNTIL THE LANDSCAPE WORK HAS BEEN RE-INSPECTED BY THE OWNER AND FOUND TO BE ACCEPTABLE. AT THAT TIME, A WRITTEN NOTICE OF FINAL ACCEPTANCE WILL BE ISSUED BY THE OWNER, AND THE MAINTENANCE AND GUARANTEE PERIODS WILL COMMENCE.
I. LANDSCAPE MAINTENANCE
   1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK SHOWN ON THESE PLANS FOR 90 DAYS BEYOND FINAL ACCEPTANCE OF ALL LANDSCAPE WORK BY THE OWNER. LANDSCAPE MAINTENANCE SHALL INCLUDE WEEKLY SITE VISITS FOR THE FOLLOWING ACTIONS (AS APPROPRIATE): PROPER PRUNING, RESTAKING OF TREES, RESETTING OF PLANTS THAT HAVE SETTLED, MOWING AND AERATION OF LAWNS, WEEDING, TREATING FOR INSECTS AND DISEASES,REPLACEMENT OF MULCH, REMOVAL OF LITTER, REPAIRS TO THE IRRIGATION SYSTEM DUE TO FAULTY PARTS AND/OR WORKMANSHIP, AND THE APPROPRIATE WATERING OF ALL PLANTINGS. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN PROPER WORKING ORDER, WITH SCHEDULING ADJUSTMENTS BY SEASON TO MAXIMIZE WATER CONSERVATION.
   2. SHOULD SEEDED AND/OR SODDED AREAS NOT BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THESE AREAS AND OBTAINING A FULL, HEALTHY STAND OF PLANTS AT NO ADDITIONAL COST TO THE OWNER.
   3. TO ACHIEVE FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD, ALL OF THE FOLLOWING CONDITIONS MUST OCCUR:
      a. THE LANDSCAPE SHALL SHOW ACTIVE, HEALTHY GROWTH (WITH EXCEPTIONS MADE FOR SEASONAL DORMANCY). ALL PLANTS NOT MEETING THIS CONDITION SHALL BE REJECTED AND REPLACED BY HEALTHY PLANT MATERIAL PRIOR TO FINAL ACCEPTANCE.
      b. ALL HARDSCAPE SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE.
      c. SODDED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1 1/2 INCHES BEFORE FIRST MOWING. BARE AREAS LARGER THAN TWELVE SQUARE INCHES MUST BE RESODDED (AS APPROPRIATE) PRIOR TO FINAL ACCEPTANCE. ALL SODDED TURF SHALL BE NEATLY MOWED.
J. WARRANTY PERIOD, PLANT GUARANTEE AND REPLACEMENTS
   1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL TREES, SHRUBS, PERENNIALS, SOD, AND IRRIGATION SYSTEMS FOR A PERIOD OF ONE YEAR FROM THE DATE OF THE OWNER'S FINAL ACCEPTANCE (90 DAYS FOR ANNUAL PLANTS). THE CONTRACTOR SHALL REPLACE, AT HIS OWN EXPENSE AND TO THE SATISFACTION OF THE OWNER, ANY PLANTS WHICH DIE IN THAT TIME, OR REPAIR ANY PORTIONS OF THE IRRIGATION SYSTEM WHICH OPERATE IMPROPERLY.
   2. AFTER THE INITIAL MAINTENANCE PERIOD AND DURING THE GUARANTEE PERIOD, THE LANDSCAPE CONTRACTOR SHALL ONLY BE RESPONSIBLE FOR REPLACEMENT OF PLANTS WHEN PLANT DEATH CANNOT BE ATTRIBUTED DIRECTLY TO OVERWATERING OR OTHER DAMAGE BY HUMAN ACTIONS.
K. PROVIDE A MINIMUM OF (2) COPIES OF RECORD DRAWINGS TO THE OWNER UPON COMPLETION OF WORK. A RECORD DRAWING IS A RECORD OF ALL CHANGES THAT OCCURRED IN THE FIELD AND THAT ARE DOCUMENTED THROUGH CHANGE ORDERS, ADDENDA, OR CONTRACTOR/CONSULTANT DRAWING MARKUPS.



1. ROLLED-TOP STEEL EDGING PER PLANS.
2. TAPERED STEEL STAKES.
3. MULCH, TYPE AND DEPTH PER PLANS.
4. FINISH GRADE.

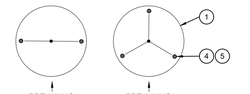
NOTES:
1) INSTALL EDGING SO THAT STAKES WILL BE ON INSIDE OF PLANTING BED.
2) BOTTOM OF EDGING SHALL BE BURIED A MINIMUM OF 1" BELOW FINISH GRADE.
3) TOP OF MULCH SHALL BE 1" LOWER THAN TOP OF EDGING.

D STEEL EDGING
SCALE: NOT TO SCALE



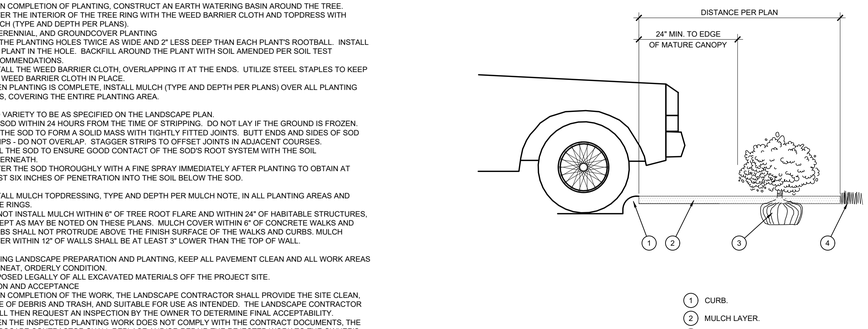
1. TREE CANOPY.
2. CINCH-TIES (24" BOX/2" CAL. TREES AND SMALLER) OR 12 GAUGE GALVANIZED WIRE WITH NYLON TREE STRAPS AT TREE AND STAKE (36" BOX/2.5" CAL. TREES AND LARGER). SECURE TIES OR STRAPS TO TRUNK JUST ABOVE LOWEST MAJOR BRANCHES.
3. 24" X 3/4" P.V.C. MARKERS OVER WIRES.
4. GREEN STEEL T-POSTS. EXTEND POSTS 12" MIN. INTO UNDISTURBED SOIL.
5. PRESSURE-TREATED WOOD DEADMAN, TWO PER TREE (MIN.), BURY OUTSIDE OF PLANTING PIT AND 18" MIN. INTO UNDISTURBED SOIL.
6. TRUNK FLARE.
7. MULCH, TYPE AND DEPTH PER PLANS. DO NOT PLACE MULCH WITHIN 6" OF TRUNK.
8. FINISH GRADE.
9. ROOT BALL.
10. BACKFILL. AMEND AND FERTILIZE ONLY AS RECOMMENDED IN SOIL FERTILITY ANALYSIS.
11. UNDISTURBED NATIVE SOIL.
12. 4" HIGH EARTHEN WATERING BASIN.
13. FINISH GRADE.

STAKING EXAMPLES (PLAN VIEW)



NOTES:
1. SCARIFY SIDES OF PLANTING PIT PRIOR TO SETTING TREE.
2. REMOVE EXCESS SOIL AND ROOT FLARE SO THAT COVERS THE ROOT FLARE. THE PLANTING HOLE DEPTH SHALL BE SUCH THAT THE ROOTBALL RESTS ON UNDISTURBED SOIL, AND THE ROOT FLARE IS 2"-4" ABOVE FINISH GRADE.
3. FOR B&B TREES, CUT OFF BOTTOM 1/3 OF WIRE BASKET BEFORE PLACING TREE IN HOLE, CUT OFF AND REMOVE REMAINDER OF BASKET AFTER TREE IS SET IN HOLE. REMOVE ALL NYLON TIES, TWINE, ROPE, AND OTHER PACKING MATERIAL. REMOVE AS MUCH BURLAP FROM AROUND ROOTBALL AS IS PRACTICAL.
4. REMOVE ALL NURSERY STAKES AFTER PLANTING.
5. FOR TREES 36" BOX/2.5" CAL. AND LARGER, USE THREE STAKES OR DEADMEN (AS APPROPRIATE), SPACED EVENLY AROUND TREE.
6. STAKING SHALL BE TIGHT ENOUGH TO PREVENT TRUNK FROM BENDING, BUT LOOSE ENOUGH TO ALLOW SOME TRUNK MOVEMENT IN WIND.

A TREE PLANTING
SCALE: NOT TO SCALE

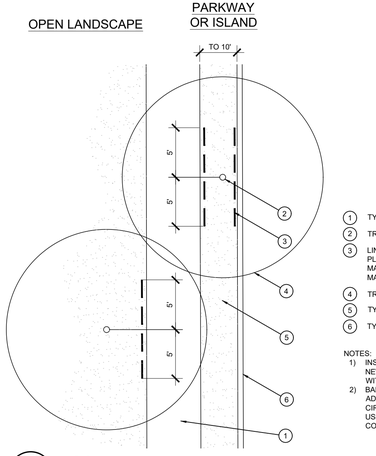


1. CURB.
2. MULCH LAYER.
3. PLANT.
4. TURF (WHERE SHOWN ON PLAN).

E PLANTING AT PARKING AREA
SCALE: NOT TO SCALE

1. SHRUB, PERENNIAL, OR ORNAMENTAL GRASS.
2. MULCH, TYPE AND DEPTH PER PLANS. PLACE NO MORE THAN 1" OF MULCH WITHIN 6" OF PLANT CENTER.
3. FINISH GRADE.
4. ROOT BALL.
5. BACKFILL. AMEND AND FERTILIZE ONLY AS RECOMMENDED IN SOIL FERTILITY ANALYSIS.
6. UNDISTURBED NATIVE SOIL.
7. 3" HIGH EARTHEN WATERING BASIN.
8. WEED FABRIC UNDER MULCH.

B SHRUB AND PERENNIAL PLANTING
SCALE: NTS



1. TYPICAL WALKWAY OR PAVING
2. TREE TRUNK
3. LINEAR ROOT BARRIER MATERIAL. SEE PLANTING NOTES FOR TYPE AND MANUFACTURER. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
4. TREE CANOPY
5. TYPICAL PLANTING AREA
6. TYPICAL CURB AND GUTTER

NOTES:
1) INSTALL ROOT BARRIERS NEAR ALL NEWLY-PLANTED TREES THAT ARE LOCATED WITHIN FIVE (5) FEET OF PAVING OR CURBS.
2) BARRIERS SHALL BE LOCATED IMMEDIATELY ADJACENT TO HARDSCAPE. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR USE ROOT BARRIERS OF A TYPE THAT COMPLETELY ENCIRCLE THE ROOTBALL.

F ROOT BARRIER - PLAN VIEW
SCALE: NOT TO SCALE

CORE STATES GROUP

April 6th, 2020

City of Portsmouth, NH
City Hall
1 Junkins Avenue
Portsmouth, NH 03801

Re: Chase Bank
1574 Woodbury Avenue
Portsmouth, NH 03801

LEED Statement per Section 2.5.3.1A from the City of Portsmouth, NH Site Plan Review Regulations

Although Chase Bank does not intend on applying for LEED Certification, the following standards shall be incorporated into design and construction:

Water Efficiency:

- Indoor Water Use Reduction
  - Appropriate high efficiency fixtures will be scheduled on the drawings.

Energy & Atmosphere:

- Minimum Energy Performance
  - The building envelope, HVAC & lighting have been designed to meet the International Energy Code.
- Fundamental Refrigerant Management
  - New equipment; No CFC-based refrigerants are used in any equipment.
- Energy Efficient Lighting
  - All lighting to be LED.

Indoor Environmental Quality:

- Minimum Indoor Air Quality Performance
  - The building ventilation has been designed to meet the minimum requirements of ASHRAE 62.1-2004.

  - The overall design solution will be implemented in the drawings and many sections of the specifications.
- Environmental Tobacco Smoke Control
  - Owner intends to prohibit smoking in the building.
  - Exterior smoking areas are located at least 25 fee away from the entries, outdoor air intakes and windows.
- Low-Emitting Materials – Adhesives & Sealants
  - Overall requirements for joint sealants, including duct sealers, with VOC content meeting the Green requirements.
  - Architectural joint sealants with maximum VOC content meeting the Green requirements.
  - Overall requirements for adhesives, with VOC content meeting the Green requirements.
- Low-Emitting Materials – Paints & Coatings
  - Paints & Stains; Water-based paints or solvent-based paints with VOC content meeting the Green requirements are used for all interior opaque applications.
- Low-Emitting Materials – Carpet Systems
  - Adhesives used in connection with carpet systems comply with VOC limit of 50 g/L.

Thermal Comfort:

- Thermal comfort, meeting the Green requirements is to be required with ventilation by mechanical means only.
- The overall design solution is implemented in the drawings and many sections of the specifications.

Roofing Membrane:

- Thermoplastic membrane roofing.
  - White membrane roofing, solar reflective index (SRI) 99.
  - Recycled content.

Sincerely,

James T. Lalli, AIA
Director of Architecture - Financial
908.462.9949 | jlalli@core-states.com

STORMWATER MANAGEMENT & SOIL EROSION CONTROL REPORT

FOR

JP MORGAN CHASE BANK – PORTSMOUTH

LOT 17, ASSESSOR MAP 238

1574 WOODBURY AVENUE

CITY OF PORTSMOUTH

ROCKINGHAM COUNTY, NEW HAMPSHIRE

PREPARED BY:

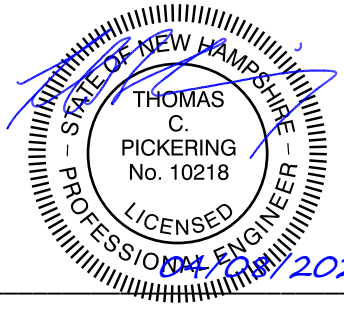
CORE STATES GROUP

9 Galen Street, Suite 117

Watertown, Massachusetts 02472

857-500-4702

April 03, 2020



Thomas Pickering, P.E.

NH License No. 10218

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LIST OF APPENDICES

I. INTRODUCTION

The proposed Chase Bank is a commercial re-development project within the G1, Gateway Corridor District, located on Woodbury Avenue between Durgin Lane and Arthur Brady Drive part of the overall development known as "Durgin Square" situated in the City of Portsmouth, New Hampshire. The overall site **(See Appendix "A")** consists of a total tract area of 1.002 acres or 43,673 square-feet, as reference from Assessors Map 238 Lot 17. The proposed re-development of this property will include the demolition of approximately 4,600-square foot existing restaurant building, foundations, landscaping, pavement, concrete and associated utilities. The re-development proposes the construction of a new single-story Chase Bank with one (1) remote drive-thru ATM and bypass lane. The proposed redevelopment will disturb approximately 0.784 acres (34,171 sf) of the subject property. The design intent for stormwater management is to meet City of Portsmouth stormwater requirements under Ordinance Section-7.4 and in conjunction with New Hampshire Stormwater Manual.

The site is located solely within a commercialized area in the City of Portsmouth, New Hampshire. No streams or waterways are located on the subject site or adjoining the property. The subject property is occupying a parcel lot that is part of an overall shopping center. The intent of this report is to show the proposed stormwater analysis and conditions for the Chase Bank development. The majority of the site's stormwater discharges to three (3) points of analyses that discharge directly to study points located as shown on the attached drainage area maps (**See Appendix "D"**).

II. METHODOLOGY

Run-off has been generated under both pre- and post-development conditions in accordance with "Technical Release No. 55-Urban Hydrology for Small Watersheds" and City of Nashua Stormwater Management Ordinance Section 190-215 "Stormwater management standards".

Runoff curve numbers (CN's) have been established by use of the hydrologic soil groups associated with the soils found in the Rockingham County Soil Survey. A composite soil survey map **(See Appendix "B")** is provided for review of the general soil characteristics. See the chart below of CN number breakdown for existing and proposed.

	CN
Grass/Lawn Coverage (Soil Group B)	69
Impervious Coverage	98

The existing soil stratum found within the project area is comprised of one soil type, Chatfield-Jollis-Canton (140B) as identified from mapping available from the Natural Resource Conservation Service Web Soil Survey and found in **Appendix "B".**

The proposed time of concentration is based on overland and sheet flow. The time of concentration for the drainage areas has been set to a minimum value of 6 minutes (0.10 hours), per the TR-55 Manual, for the purpose of the calculations.

Hydrographs were generated using "Hydraflow Hydrographs Extension for AutoCAD" by Autodesk, Inc. This program is based upon the Soil Conservation Service methodology for tabular hydrographs using the Type III storm event as detailed in" Technical Release No. 55-Urban Hydrology for Small Watersheds." The 24-hour rainfall for the four (4) respective storms studied have been gathered from the National Oceanic and Atmospheric Administration rainfall data:

Storm Event	24 Hour Rainfall
2-yr*	3.32"
10-yr*	5.33"
25-yr*	6.59"
50-yr*	7.51"

*Based on Rainfall Event over a 24-hour period.

III. HYDROLOGIC ANALYSIS

A. Existing Drainage Area Conditions

As shown on the Existing Drainage Area Map **(See Appendix "D")**, the existing project is comprised of three (3) drainage areas, 0.784 acres, which all discharge into three (3) study points. Study Point 1 is identified as the majority of the onsite flow that flows to the existing stormwater conveyance system. Existing Drainage Area 1, which is primarily located on the north and west part of the site, drains to Study Point-1. Study Point 2 which collects Existing Drainage Area 2 is identified by the flow that bypasses the existing stormwater conveyance system and flows to overall shopping center. The last study point, Study Point 3, is identified as the overland flow that discharges onto the public Right-of-Way and does not flow into the shopping center system. The hydraulic calculations for the existing drainage areas for each study point can be found in **Appendix "C"**.

B. Proposed Drainage Area Conditions

The proposed drainage conditions are design to replicate the existing drainage conditions while meeting the City of Portsmouth's stormwater regulations. As shown on the Proposed Drainage Area Map **(See Appendix "D")**. As it is existing, the proposed drainage area map comprises of three drainages areas which discharge to three separate study points. The hydraulic calculations for the proposed drainage areas for each study point can be found in **Appendix "C".** The description of each drainage area is located below.

IV. STORMWATER MANAGEMENT REQUIREMENTS

A. Best Management Practices (Section 7.4.2)

Per the City of Portsmouth Stormwater Management Regulations as described in Section 7.4 of Site Plan Review regulations all developments under site plan review regardless of limit of disturbance shall meet, as applicable, the 23 requirements for Best Management Practices. Below you will find how the development meets the applicable management practices.

- **Section 7.4.2.1-3**
  The Best Management Practices for sections 1-3 are not applicable to the project and therefore do not need to be met.

- **Section 7.4.2.4**
  "Snow storage areas shall be located such that no direct discharges to receiving waters are possible from the storage site. Runoff from snow storage areas shall enter treatment areas to remove suspended solids and other contaminants before being discharged to receiving waters or preferably be allowed to infiltrate into the groundwater."

  The proposed project is a redevelopment and near no streams or waterways, therefore would not have any direct discharge into receiving waters. Additionally, as part of the redevelopment the project is proposing water quality system at the most downstream part of the existing conveyance system to treat site runoff. Further details on the proposed water quality system of the project can be found below.

- **Section 7.4.2.5**
  "Every effort shall be made to retain stormwater on the site using the natural or existing flow patterns of the site."

  The proposed project is a redevelopment where a majority of the existing drainage patterns are contained on the on-site storm conveyance system and do not discharge to adjacent properties. As part of the proposed redevelopment the existing drainage patterns will be maintained.

- **Section 7.4.2.6-7**
  The Best Management Practices for sections 6-7 are not applicable to the project and therefore do not need to be met. Since the overall site is being reduced in impervious coverage and on-site water quality system is being proposed, the need for infiltration practices are not required.

- **Section 7.4.2.8**

  "Measure shall be taken to control the post-development peak rate of runoff so that it does not exceed pre-development runoff for the 2-, 10-, 25-, 50-year, 24 hour storm event.

In order to meet this standard, a pre- and post- development comparison of the 2-, 10- , 25-, 50- year storm events for each study point can be found in **Appendix "D".** The calculations show that at any point the post-development peak discharge rate does not exceed the pre-development peak discharge rate for any storm event. A summary of the runoff quantities can be found on the table below:

Summary of Existing and Proposed Runoff Quantity			
Area	Storm Event	Existing	Proposed
		Flow (cfs)	Flow (cfs)
Study Point - 1	2-year	2.103	1.535
	10-year	3.592	2.984
	25-year	4.514	3.900
	50-year	5.184	4.567
Study Point - 2	2-year	0.053	0.042
	10-year	0.119	0.121
	25-year	0.163	0.177
	50-year	0.195	0.220
Study Point -3	2-year	0.047	0.060
	10-year	0.117	0.146
	25-year	0.164	0.206
	50-year	0.199	0.250
TOTAL LOT RUNOFF	2-year	2.203	1.637
	10-year	3.828	3.252
	25-year	4.841	4.283
	50-year	5.578	5.037

As shown above a majority of the site's runoff is being reduced except for study points 2 & 3 which shown a slight increase in post-development runoff however very insignificant volume/flow . However, the total combined runoff is being reduced.

Therefore, described above and through the hydraulic analysis of the pre-development and post-development conditions of the site, the proposed development meets the criteria for stormwater quantity as defined in Section 7.4.2.8 in the City of Portsmouth Ordinance.

- **Section 7.4.2.9**

  "The applicant shall demonstrate that on- and off-site downstream channel or system capacity is sufficient to carry the stormwater run-off volume flow without adverse effects, such as flooding and erosion of stream banks and shoreland areas.

  As previously stated, the overall combined site runoff of the post-development drainage is being reduced from the pre-development conditions. Therefore, it is determined that no adverse effects of the downstream bank for the proposed project.

- **Section 7.4.2.10**

  The Best Management Practices for section 10 are not applicable to the project and therefore do not need to be met.

- **Section 7.4.2.11**

  "For a storm even of ½ inch or less, the applicant shall demonstrate that stormwater management practices will remove contaminants from the stormwater runoff that leaves the site. The use of oil and grit traps in manholes, on-site vegetated waterways, and vegetated buffer strips along waterways and drainage swales, and the reduction in use of deicing salts and fertilizers may be required by the Planning Board."

  Per the New Hampshire Stormwater Manual and the City of Portsmouth, a water quality device was added at the most downstream pipe conveyance system to meet the requirements. The proposed water quality device meets the Standards depicted in the New Hampshire Stormwater Manual which requires 80% TSS Removal rate of the "first wash" water quality storm event.

  The New Hampshire Stormwater Manual defines the "first wash" water quality storm as the first 1" rainfall of any given storm event. As mentioned previously a CDS 2015-4 unit by Contech has been provided to meet these standards, a CDS Removal Rate calculated for this project has been provided in **Appendix "E"**. The CDS unit uses indirect screening technique to remove suspended solids, fine sands and larger particles. Additionally, the unit has an internal weir/bypass system to only provide solids removal for the water quality storm event and not inhibit the flow of the other storm events. A design summary of the CDS Unit can be found in **Appendix "E".**

- **Section 7.4.2.12**

  The Best Management Practices for section 12 are not applicable to the project and therefore do not need to be met.

- **Section 7.4.2.13**

  "The design of the on-site stormwater drainage systems shall not increase or impede existing flows."

  As previously stated, the overall combined site runoff of the post-development drainage is being reduced from the pre-development conditions. Therefore, it is determined that no adverse effects to the existing flows.

- **Section 7.4.2.14-19**

  The Best Management Practices for sections 14-19 are met through the proposed project. An extensive landscape and soil erosion plans are proposed to maintain integrity of downstream drainage systems in and the proposed development shall be stabilized as per these requirements.

- **Section 7.4.2.20-23**

  The Best Management Practices for section 20-23 are not applicable to the project and therefore do not need to be met.

B. Groundwater Recharge

Per the New Hampshire Stormwater Manual the proposed development groundwater recharge must meet the pre-development groundwater recharge. Since the overall impervious coverage of the site is being reduced the annual post development groundwater recharge will naturally exceed what is existing. It is determined, that no additionally BMP techniques are required to meet the groundwater recharge volume requirement.

V. SOIL EROSION AND SEDIMENT CONTROL

A. Overview

The Soil Erosion and Sediment Control Measures for this project include adequately installed perimeter silt fencing, temporary and permanent seeding and mulching, inlet protection, and the installation of temporary stone tracking pads at the project site entrance. A Phase I and Phase II plan has been provided in the drawings set for your reference. All provisions are to be in accordance with the "New Hampshire Stormwater Manual Volume 3".

The soil erosion and sediment control plan will minimize the downstream erosion hazard by controlling runoff at its source, minimizing runoff from disturbed areas and de- concentrating storm water runoff. The objectives of the erosion control plan will be achieved through the management of storm water runoff during construction.

B. Temporary Erosion and Sediment Control Measures

The temporary soil erosion and sediment control measures will include, but not limited to, silt fences, diversion ditches, stabilization of the construction entrance, sediment traps and basins, storm drain inlet protection, hydro-seeding and dust control. Detailed descriptions of each of the measures that will be employed on the project have been included in the following paragraphs:

- **Silt Fences** - Silt fences consist of standard strength filter fabric with wire mesh reinforcement (or extra strength synthetic filter fabric) secured to supporting posts and entrenched at the base. Filter fabric requirements and installation design criteria will be in accordance with the requirements in the "New Hampshire Stormwater Manual Volume 1-3". Silt fences will be installed on the down slope side of work areas, as close to the disturbed areas as possible. Sediment will be removed from behind silt fences when sediment has accumulated to one-third of the original height of the fence.
- **Dust Control -** Dust Control shall be accomplished through the use of vegetative cover, mulch, spray adhesive, sprinkling or barriers. Water will be applied by sprinkler or water truck as necessary during grading operations to minimize sediment transport and maintain acceptable air quality conditions. Repetitive treatments will be done as needed until grades are paved or stabilized with vegetation.
- **Stabilized Construction Entrance -** A ramp of crushed stone extending a minimum distance of 50 feet will be installed at each point of ingress and egress from the site. The purpose of the device is to minimize the potential of tracking mud from the site onto public rights-of-way or adjoining properties. The entrance shall be maintained in a condition, which will prevent tracking, or flowing of sediment onto public rights-of-way, all sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.

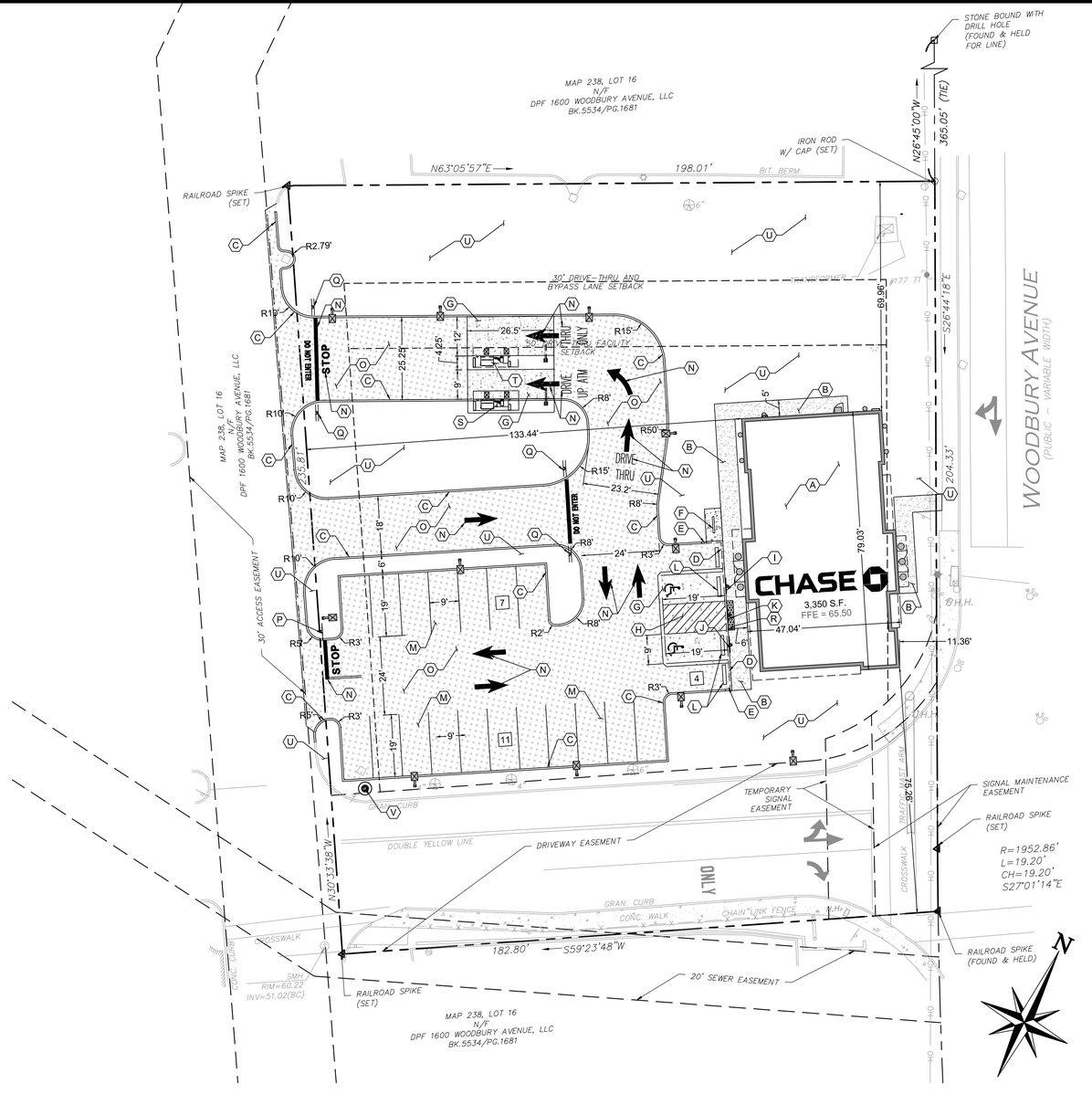
- **Soil Stockpiling -** Topsoil and earth material shall be stockpiled for reuse at the location shown on the Erosion Control Plans. All stockpiles shall be protected using a perimeter dike of silt fence or straw bale sediment barriers to prevent sediment runoff. This applies to all stockpiles remaining in place for more than two weeks. Stockpile side slopes shall not exceed 2 horizontal to 1 vertical (2:1). Temporary seeding or covering of stockpiles shall be completed within two weeks of formation.

VI. CONCLUSION

The implementation of the City of Portsmouth standards for stormwater management design have been presented and achieved through the proposed stormwater management analysis and design. Using stormwater conveyance systems, the runoff throughout the developed site has been designed to meet the necessary requirements. Based upon this analysis, the proposed storm water management system will benefit the existing downstream conveyance system by providing a reduction in impervious area and reducing peak flow stormwater rates to them.

APPENDIX A

OVERALL SITE PLAN



SITE PLAN
SCALE 1" = 20'

GRAPHIC SCALE
20 10 5 0 20
1" = 20'

ALERT TO CONTRACTOR:

PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OF THE DRY UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM ENGINEER AND THE OWNER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. ENGINEER AND OWNER SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION.

GENERAL NOTES:

THIS DRAWING REFERENCES: 1574 WOODBURY AVENUE
TOPOGRAPHIC PLAN OF LAND
PREPARED BY: ALLEN & MAJOR ASSOCIATES, INC.
100 COMMERCE WAY, SUITE 5
WOBURN, MA 01801
CONTACT: ANDREW RUGGLES
TEL: (781) 362-5313
DATED: 08/28/2019

PROPERTY OWNER: RICHARD P. FUSEGNI
201 KEARSARGE WAY
PORTSMOUTH, NH 03801
CONTACT: SCOTT MITCHELL
(603) 475-377

APPLICANT: J.P. MORGAN CHASE BANK
1450 BRICKELL AVENUE 3RD FLOOR
MIAMI, FL 33131
CONTACT: CHRIS FOIT
TEL: (786) 473-1769

1) SITE ADDRESS: 1574 WOODBURY AVENUE
PORTSMOUTH, NH 03801
COUNTY OF ROCKINGHAM

2) ZONING DATA: ZONED: G-1 GATEWAY CORRIDOR DISTRICT

EXISTING USE: RESTAURANT - RUBY TUESDAYS **(PERMITTED)**
PROPOSED USE: BANK **(PERMITTED BY RIGHT)**
: DRIVE THROUGH **(CONDITIONAL USE PERMIT REQUIRED)**

§10.5B34.60 (SMALL COMMERCIAL BUILDING)

	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA, SF:	N/A	43,673 S.F.	NO CHANGE
MIN. LOT FRONTAGE, FT:	50 FT.	204.32 FT.	NO CHANGE
FRONT YARD SETBACK, FT:	0 FT. - 20 FT.	88 FT.	11.36 FT.
MIN. SIDE YARD SETBACK, FT:	10 FT.	10 FT.	69.96 FT.
MIN. REAR YARD SETBACK, FT:	15 FT.	16.4 FT.	133.44 FT.
MAX. HEIGHT, FT:	40 FT.	± 20 FT.	21.5 FT.
MAX. HEIGHT, STORIES:	3	1	1
MIN. STREET FACADE HEIGHT:	18 FT.	± 20 FT.	21.5 FT.
MIN. OPEN SPACE COVERAGE:	10%	17.79% (7,770 S.F.)	40.99% (17,901 S.F.)
MAX. BUILDING COVERAGE:	70%	10.53%	7.6%
MAX. BUILDING FOOTPRINT:	10,000 S.F.	4,600 S.F.	3,350 S.F.

3) PARKING REQUIREMENTS:
§10.1112.30 OFF-STREET PARKING REQUIREMENTS PER THE CITY OF PORTSMOUTH ZONING ORDINANCE:

FOR PROFESSIONAL, BUSINESS AND FINANCIAL SERVICES:
1 SPACE PER 350 SQUARE FEET OF GROSS FLOOR GROSS AREA

GROSS FLOOR GROSS AREA = 3,350 S.F. (MAIN BUILDING)
CALCULATION: 1 SPACE X (3,350 S.F. / 350 S.F.)
REQUIRED = 10 SPACES

EXISTING PARKING SPACES: 62 SPACES (INCLUDING 3 ACCESSIBLE SPACES)
PROPOSED PARKING SPACES: 22 SPACES (INCLUDING 2 ACCESSIBLE SPACES)

PARKING DIMENSIONS
EXISTING: VARIES
REQUIRED: 8.5' X 19'
PROPOSED: 9' X 19'

4) ALL EXISTING FEATURES ARE TO REMAIN UNLESS OTHERWISE NOTED.
5) ALL PAVEMENT MARKINGS SHALL BE LONG LIFE EPOXY.
6) PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS BY ALL OF THE PERMITTING AUTHORITIES.
7) ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY.
8) ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
9) SOLID WASTE TO BE DISPOSED OF BY CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
10) ALL EXCAVATED UNSUITABLE MATERIAL MUST BE TRANSPORTED TO AN APPROVED DISPOSAL LOCATION.
11) CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION AND SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.

SITE KEY NOTES:

A. PROPOSED 3,350 S.F. JPMORGAN CHASE BANK BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
B. PROPOSED CONCRETE SIDEWALK. REFER TO CONSTRUCTION DETAILS SHEET.
C. PROPOSED CONCRETE CURB. REFER TO CONSTRUCTION DETAILS SHEET.
D. PROPOSED DEPRESSED CONCRETE CURB. REFER TO CONSTRUCTION DETAILS SHEET.
E. PROPOSED TRANSITION CURB SECTION. REFER TO CONSTRUCTION DETAILS SHEET.
F. PROPOSED BIKE RACK ON CONCRETE PAD. REFER TO CONSTRUCTION DETAILS SHEET.
G. PROPOSED CONCRETE PAD. REFER TO CONSTRUCTION DETAILS SHEET.
H. PROPOSED 9' X 19' ACCESSIBLE PARKING SPACE AND AISLE WITH SYMBOLS OF ACCESSIBILITY. REFER TO CONSTRUCTION DETAILS SHEET.
I. PROPOSED VAN ACCESSIBLE PARKING SIGN. REFER TO CONSTRUCTION DETAILS SHEET.
J. PROPOSED ACCESSIBLE PARKING SIGN. REFER TO CONSTRUCTION DETAILS SHEET.
K. PROPOSED NO PARKING ANYTIME SIGN. REFER TO CONSTRUCTION DETAILS SHEET.
L. PROPOSED WHEEL STOP. REFER TO CONSTRUCTION DETAILS SHEET.
M. PROPOSED 9' X 19' STANDARD PARKING SPACE. REFER TO CONSTRUCTION DETAILS SHEET/
N. PROPOSED SITE MARKINGS. REFER TO CONSTRUCTION DETAILS SHEET.
O. PROPOSED ASPHALT PAVEMENT. REFER TO CONSTRUCTION DETAILS SHEET.
P. PROPOSED STOP SIGN. REFER TO CONSTRUCTION DETAILS SHEET.
Q. PROPOSED STOP & DO NOT ENTER SIGN. REFER TO CONSTRUCTION DETAILS SHEET.
R. PROPOSED DETECTABLE WARNING SURFACE. REFER TO CONSTRUCTION DETAILS SHEET.
S. PROPOSED DRIVE-UP SIGNATURE ATM CANOPY. REFER TO CONSTRUCTION DETAILS SHEET.
T. PROPOSED "FUTURE" DRIVE-UP SIGNATURE ATM CANOPY. REFER TO CONSTRUCTION DETAILS SHEET.
U. PROPOSED LANDSCAPE AREA. REFER TO LANDSCAPE PLAN FOR DETAILS.
V. PROPOSED CDS WATER QUALITY UNIT BY CONTECH. SEE CONSTRUCTION DETAILS.

SITE LEGEND

- EXISTING PROPERTY BOUNDARY LINE
- EXISTING ADJOINING PROPERTY LINE
- EXISTING ROAD CENTERLINE
- PROPOSED ROAD CENTERLINE
- PROPOSED DITCH CENTERLINE
- PROPOSED LIMITS OF BMP / DETENTION
- PROPOSED SAWCUT LINE
- EXISTING CURB
- PROPOSED CURB
- PROPOSED MOUNTABLE CURB
- PROPOSED BUILDING
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- EXISTING SANITARY STRUCTURES
- EXISTING WATER STRUCTURES
- EXISTING OVERHEAD WIRES
- PROPOSED PARKING COUNT

CORE STATES INC.
12700 HILLCREST ROAD
Suite 192
Dallas, TX 75230
(214) 377-5060
www.core-eng.com

CLIENT

CHASE

811 Know what's below. Call before you dig.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON DESIGN PLANS AND/OR FIELD SURVEY AND MAY NOT REFLECT ACTUAL CONDITIONS OR MEASUREMENTS TAKEN IN THE FIELD. CORE STATES, INC. DOES NOT GUARANTEE THAT LOCATIONS SHOWN ARE EXACT. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES.

REV	DATE	COMMENT	BY
1	4/6/2020	RESUBMISSION TO TOWNSHIP	KGF

DOCUMENT

SITE PLAN APPROVAL FOR CHASE BANK

SITE LOCATION

1574 WOODBURY AVENUE, PORTSMOUTH, NH 03801

ENGINEER SEAL
THOMAS C. PICKERING, P.E.
PEN. 0010218

CORE STATES, INC. NH STATE CERTIFICATE OF AUTHORIZATION #01208

SHEET TITLE

SITE PLAN

JOB #:	JPM.27086
DATE:	04/03/2020
SCALE:	AS NOTED
DRAWN BY:	DJR
CHECKED BY:	AR

SHEET NO.

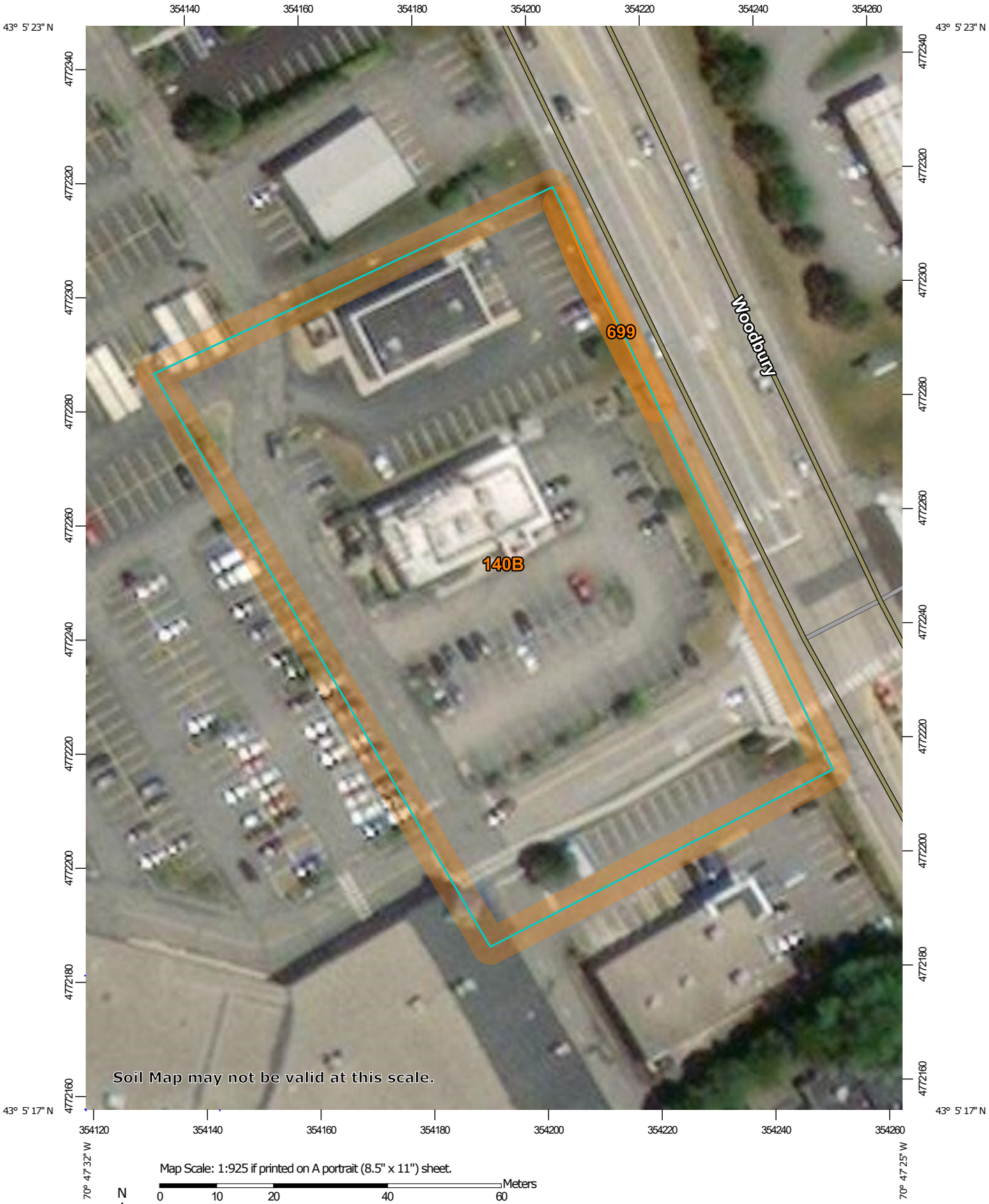
C-2

User: KFURAO Plot Date/Time: Apr. 08, 20 - 13:17:26 Drawing: C:\Users\kfurao\appdata\local\temp\AcPublish_17944\JPM.27086 - P-SITE.dwg /C-2 SITE

APPENDIX B

WEB SOIL SURVEY MAP

Soil Map—Rockingham County, New Hampshire
(Chase Bank Portsmouth, NH Soils Map)



Map Scale: 1:925 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 10 20 40 60

Feet
0 40 80 160 240

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Rockingham County, New Hampshire
Survey Area Data: Version 21, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

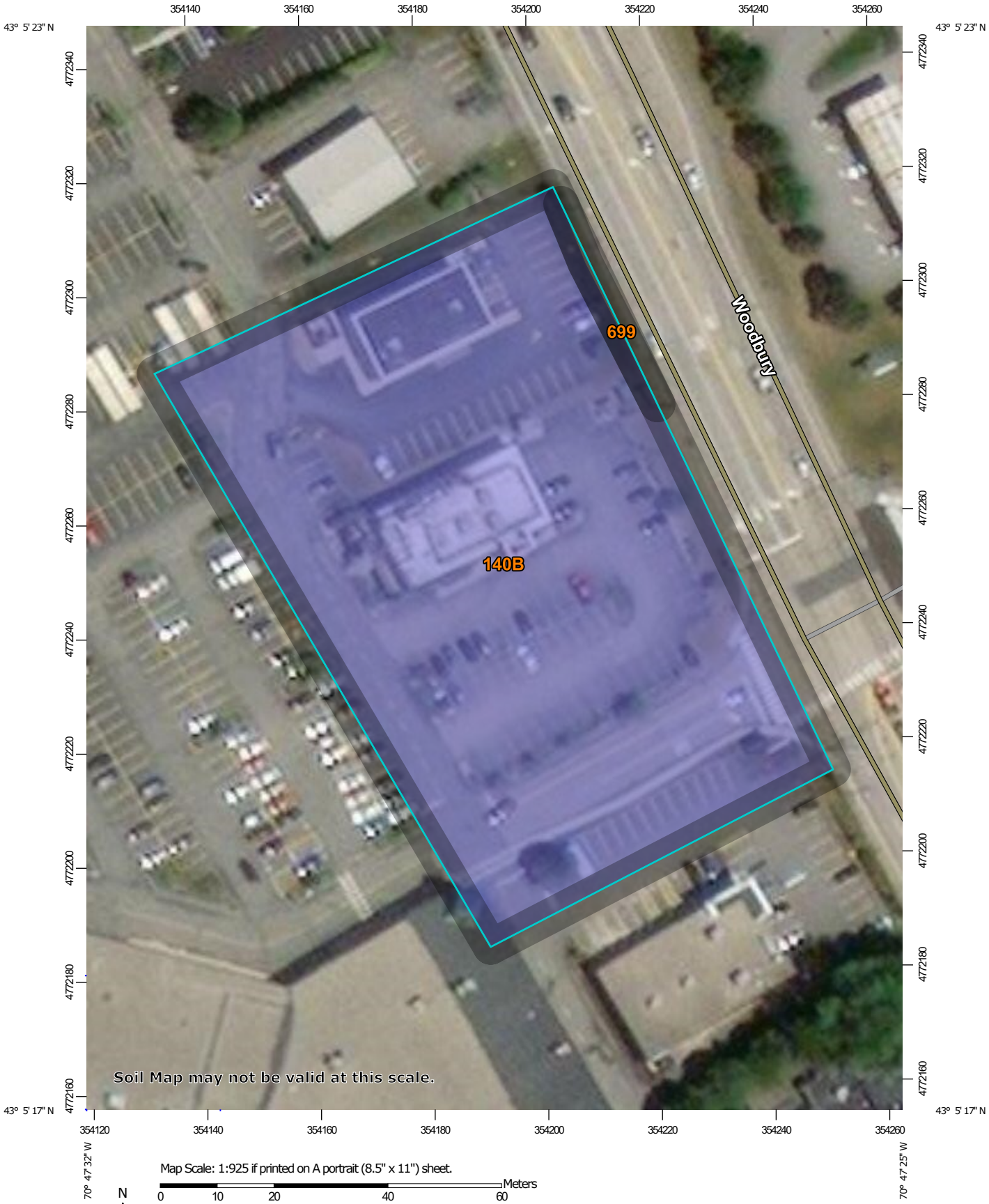
Date(s) aerial images were photographed: Dec 31, 2009—Sep 9, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
140B	Chatfield-Hollis-Canton complex, 0 to 8 percent slopes, rocky	2.1	99.8%
699	Urban land	0.0	0.2%
Totals for Area of Interest		**2.1**	**100.0%**

Hydrologic Soil Group—Rockingham County, New Hampshire
(Chase Bank Portsmouth, NH Soil Group)



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Lines

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Points

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Rockingham County, New Hampshire
Survey Area Data: Version 21, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Sep 9, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
140B	Chatfield-Hollis-Canton complex, 0 to 8 percent slopes, rocky	B	2.1	99.8%
699	Urban land		0.0	0.2%
Totals for Area of Interest			**2.1**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

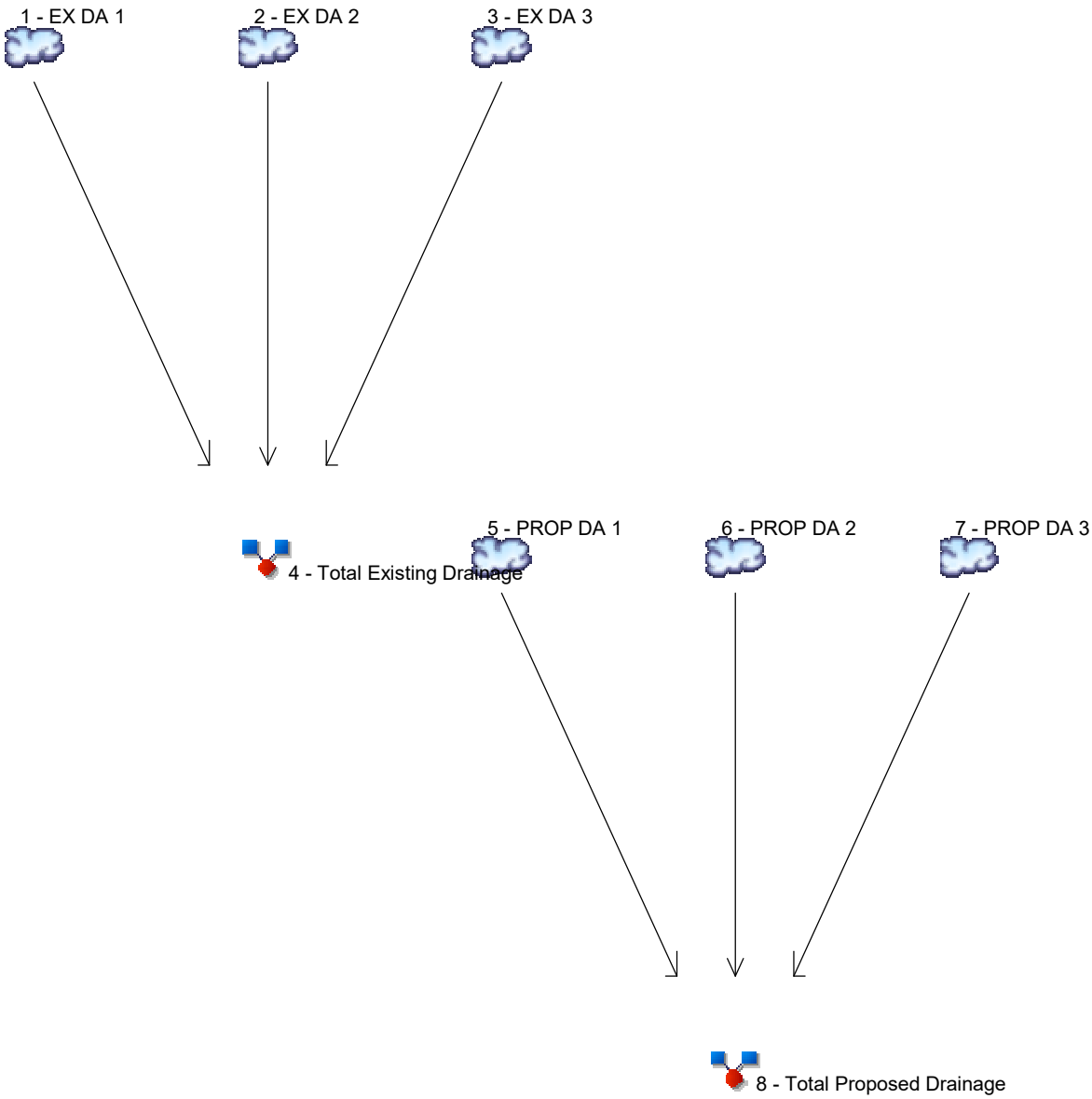
Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX C

HYDRAULIC CALCULATIONS REPORT

Watershed Model Schematic



Legend

Hyd.	Origin	Description
1	SCS Runoff	EX DA 1
2	SCS Runoff	EX DA 2
3	SCS Runoff	EX DA 3
4	Combine	Total Existing Drainage
5	SCS Runoff	PROP DA 1
6	SCS Runoff	PROP DA 2
7	SCS Runoff	PROP DA 3
8	Combine	Total Proposed Drainage

Hydrograph Return Period Recap

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)							Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	------	-------	2.103	-------	-------	3.592	4.514	5.184	-------	EX DA 1
2	SCS Runoff	------	-------	0.053	-------	-------	0.119	0.163	0.195	-------	EX DA 2
3	SCS Runoff	------	-------	0.047	-------	-------	0.117	0.164	0.199	-------	EX DA 3
4	Combine	1, 2, 3	-------	2.203	-------	-------	3.828	4.841	5.578	-------	Total Existing Drainage
5	SCS Runoff	------	-------	1.535	-------	-------	2.984	3.900	4.567	-------	PROP DA 1
6	SCS Runoff	------	-------	0.042	-------	-------	0.121	0.177	0.220	-------	PROP DA 2
7	SCS Runoff	------	-------	0.060	-------	-------	0.146	0.206	0.250	-------	PROP DA 3
8	Combine	5, 6, 7	-------	1.637	-------	-------	3.252	4.283	5.037	-------	Total Proposed Drainage

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

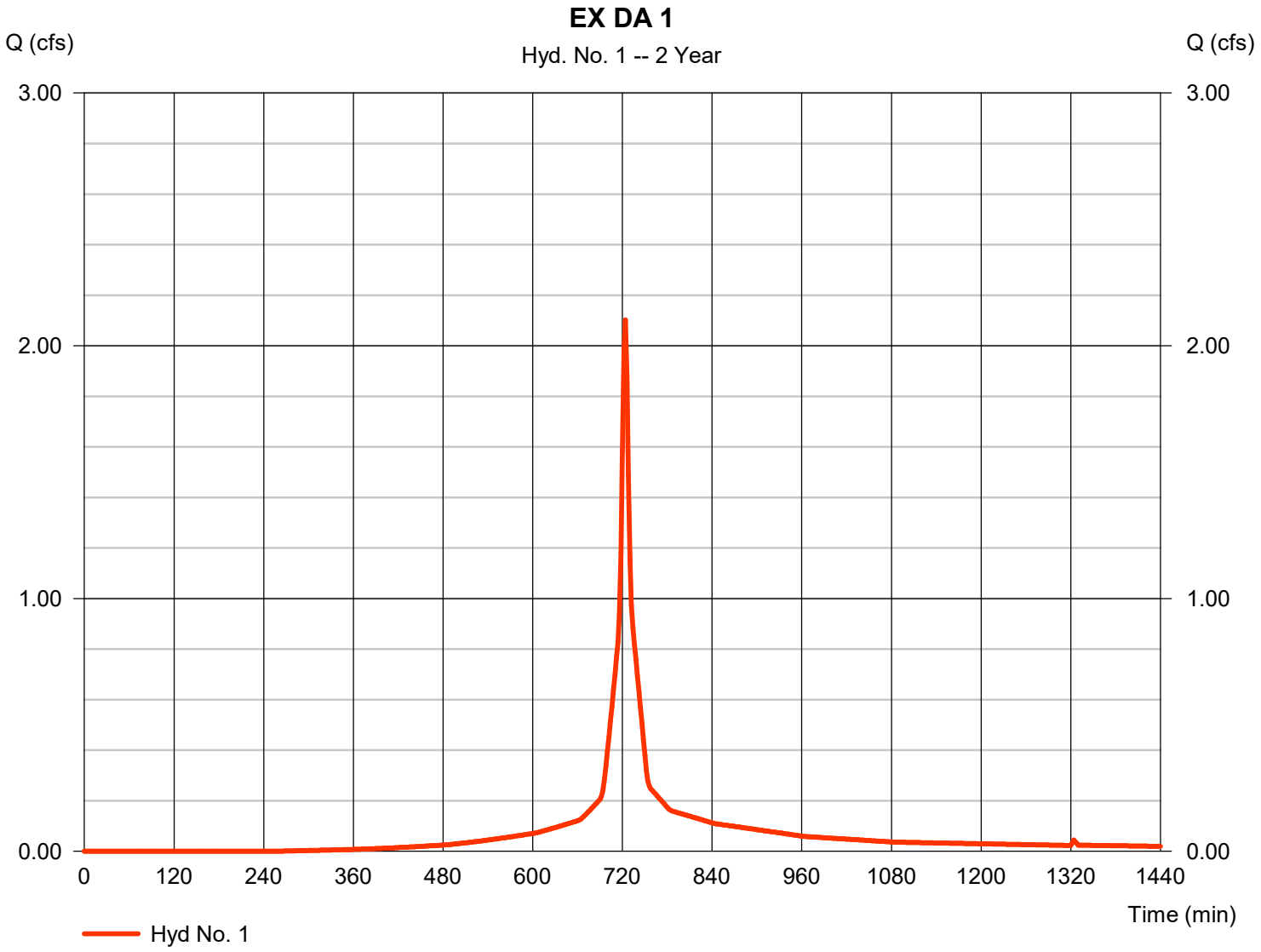
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	2.103	2	724	6,537	------	------	------	EX DA 1
2	SCS Runoff	0.053	2	724	162	------	------	------	EX DA 2
3	SCS Runoff	0.047	2	724	148	------	------	------	EX DA 3
4	Combine	2.203	2	724	6,848	1, 2, 3	------	------	Total Existing Drainage
5	SCS Runoff	1.535	2	724	4,590	------	------	------	PROP DA 1
6	SCS Runoff	0.042	2	724	141	------	------	------	PROP DA 2
7	SCS Runoff	0.060	2	724	186	------	------	------	PROP DA 3
8	Combine	1.637	2	724	4,918	5, 6, 7	------	------	Total Proposed Drainage

Hydrograph Report

Hyd. No. 1

EX DA 1

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.103 cfs
Storm frequency	=	2 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	6,537 cuft
Drainage area	=	0.750 ac	Curve number	=	93
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.32 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

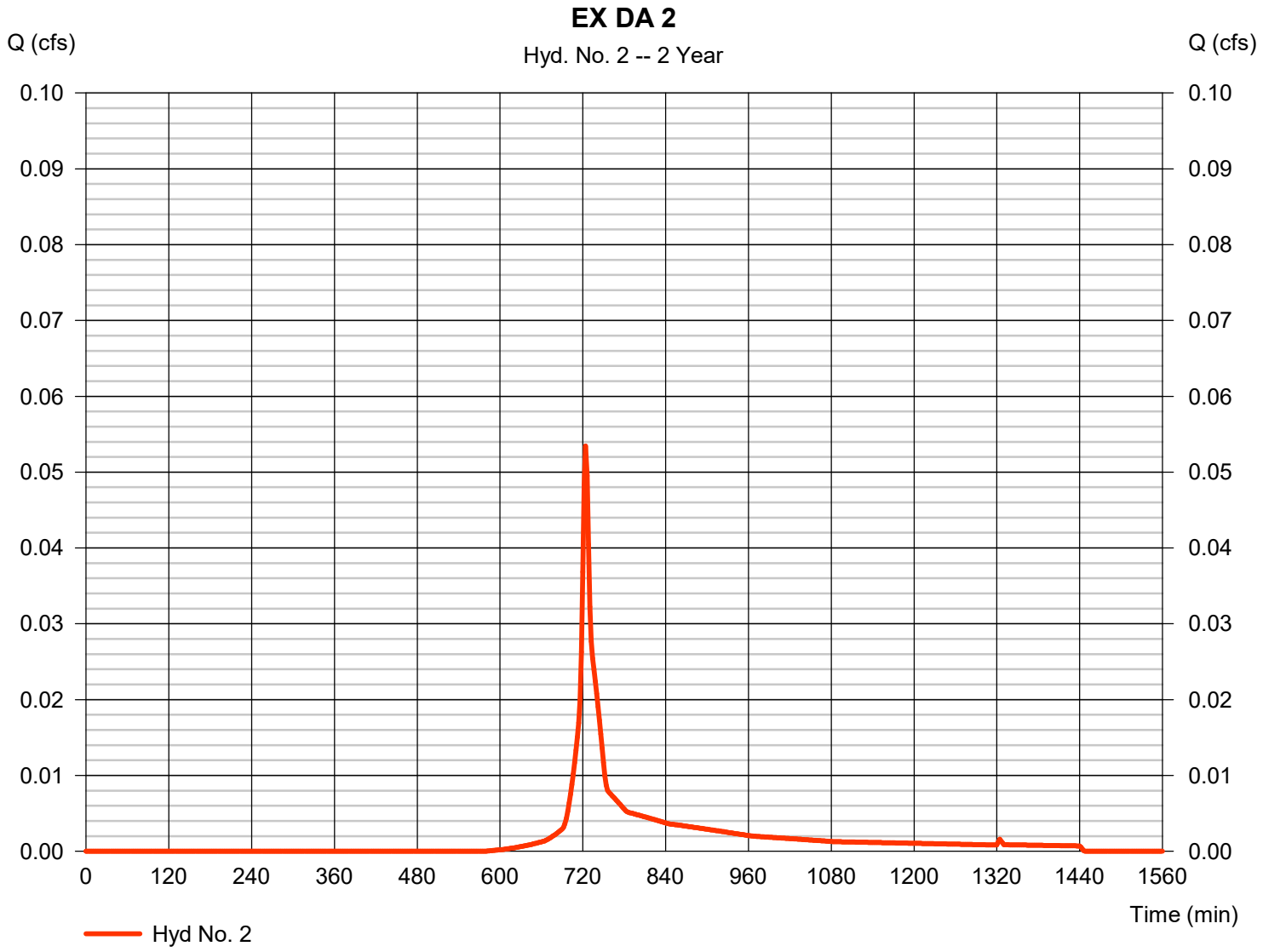


Hydrograph Report

Hyd. No. 2

EX DA 2

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.053 cfs
Storm frequency	=	2 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	162 cuft
Drainage area	=	0.035 ac	Curve number	=	78
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.32 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

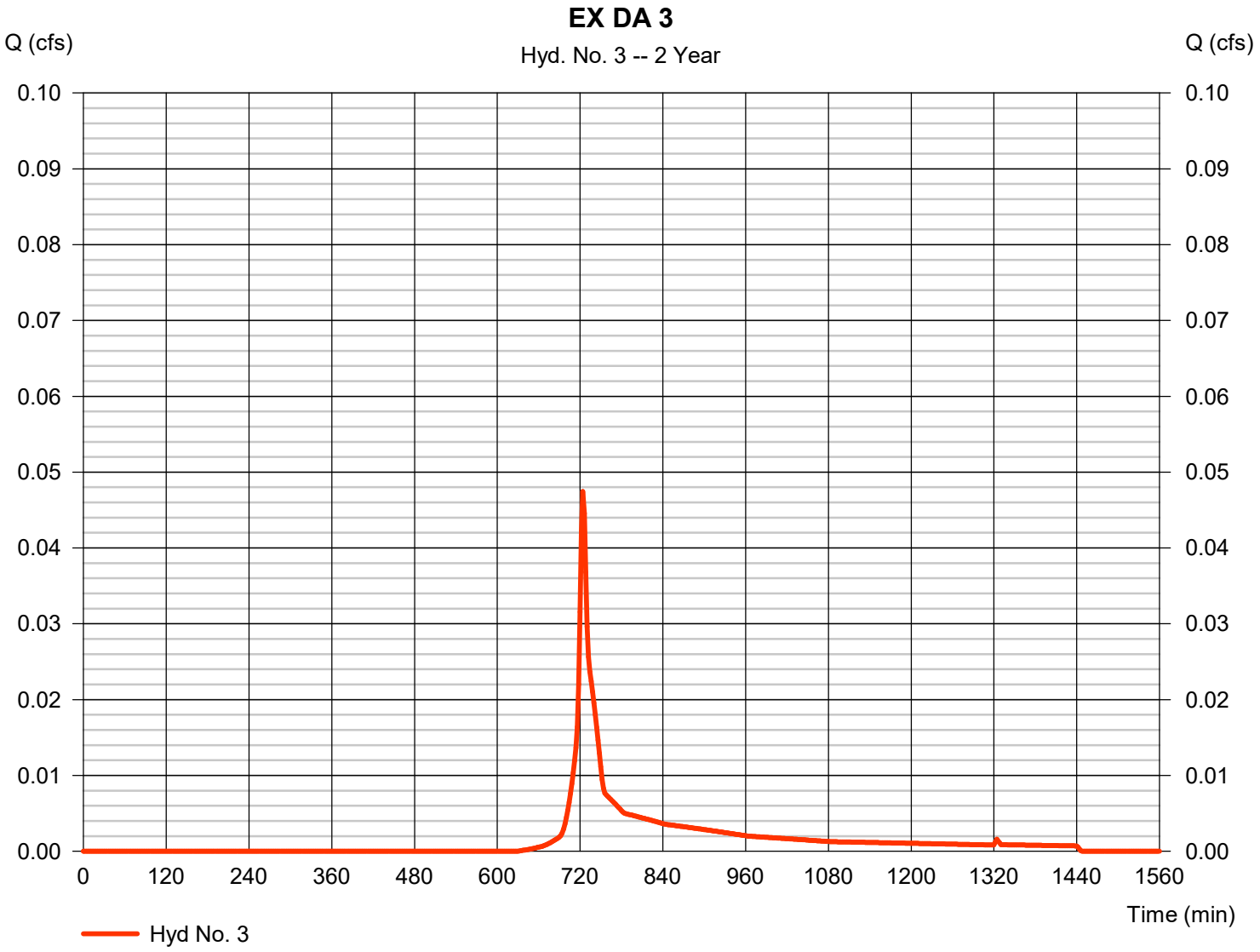


Hydrograph Report

Hyd. No. 3

EX DA 3

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.047 cfs
Storm frequency	=	2 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	148 cuft
Drainage area	=	0.039 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.32 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

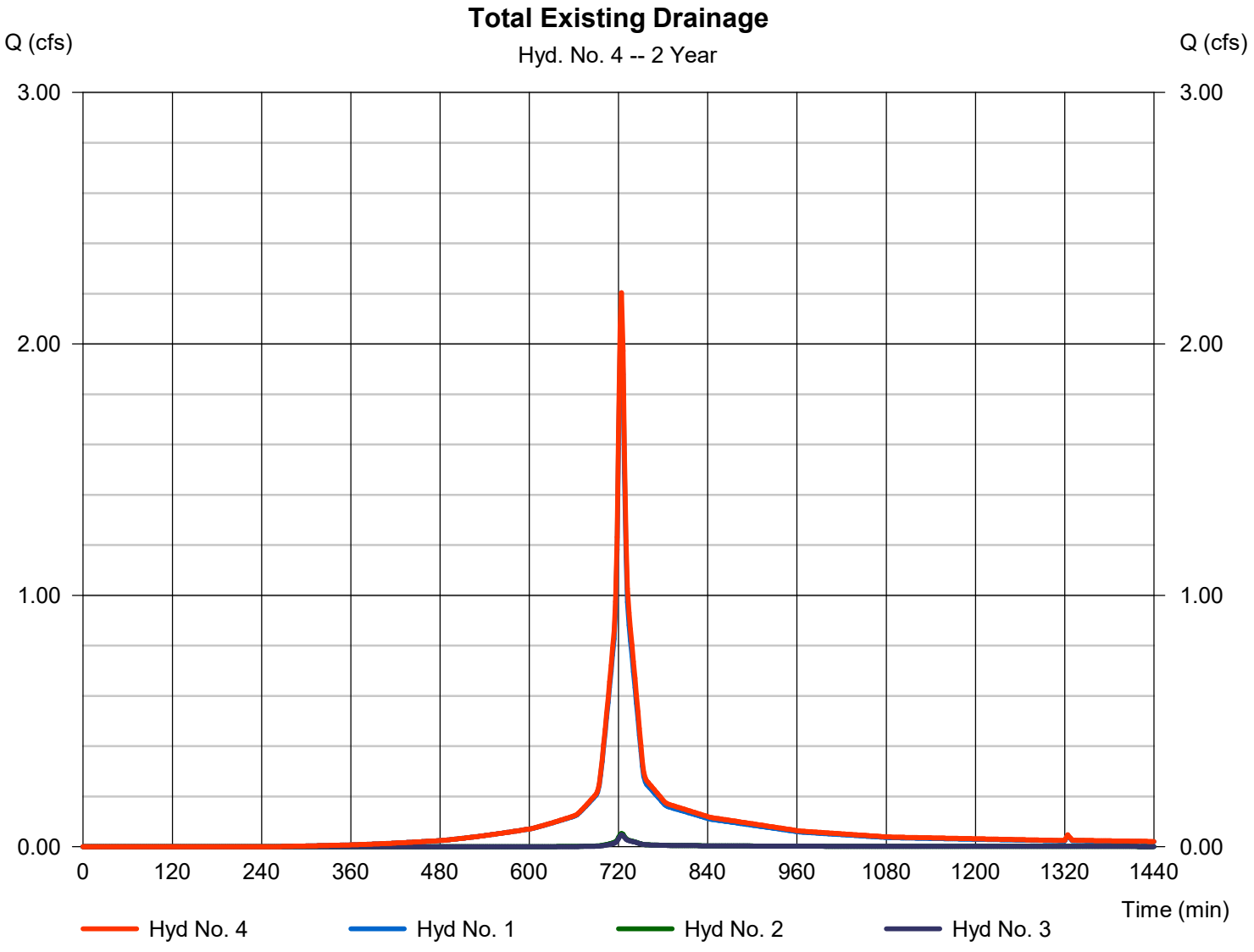


Hydrograph Report

Hyd. No. 4

Total Existing Drainage

Hydrograph type	=	Combine	Peak discharge	=	2.203 cfs
Storm frequency	=	2 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	6,848 cuft
Inflow hyds.	=	1, 2, 3	Contrib. drain. area	=	0.824 ac

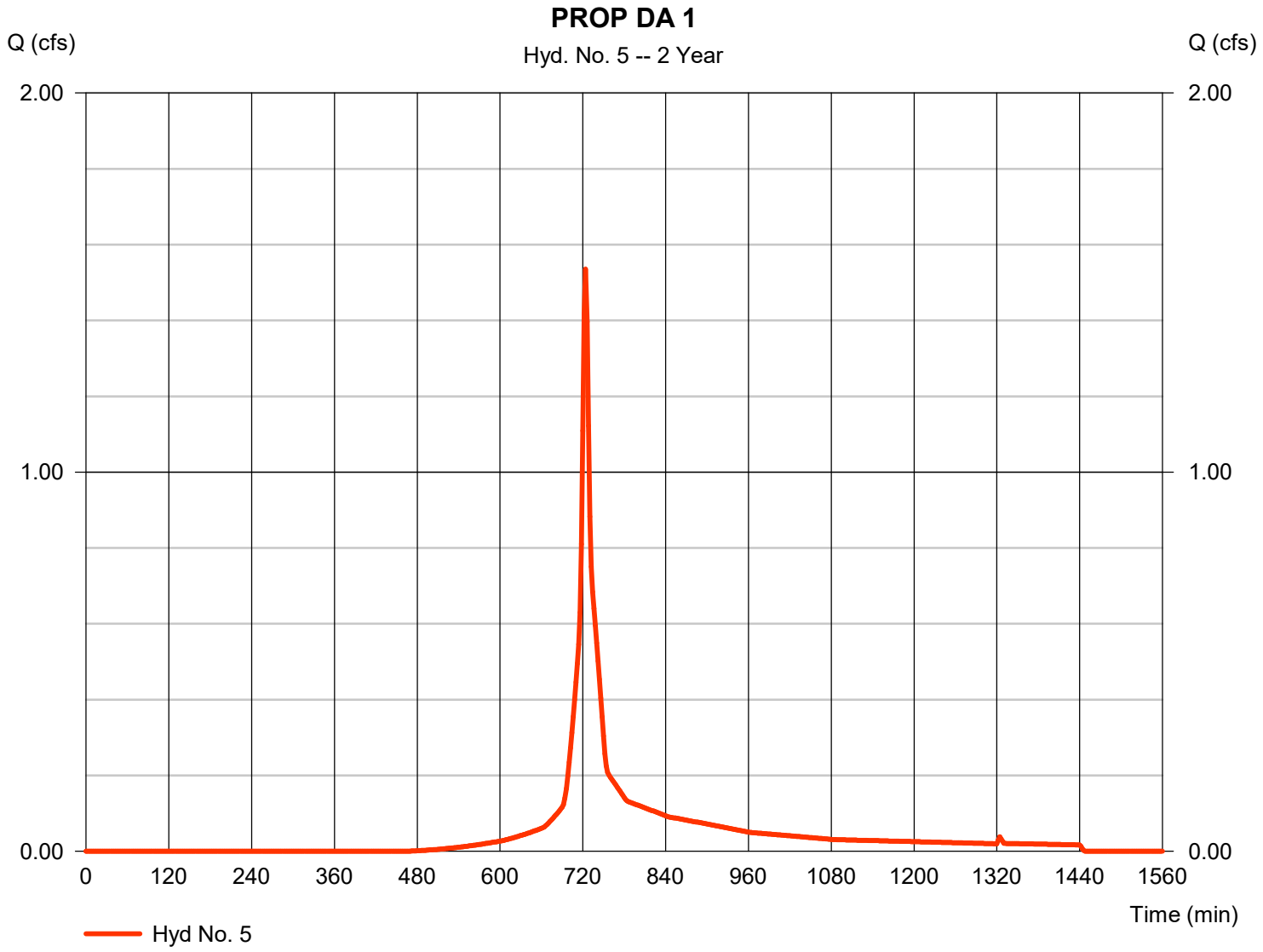


Hydrograph Report

Hyd. No. 5

PROP DA 1

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.535 cfs
Storm frequency	=	2 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	4,590 cuft
Drainage area	=	0.725 ac	Curve number	=	85
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.32 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

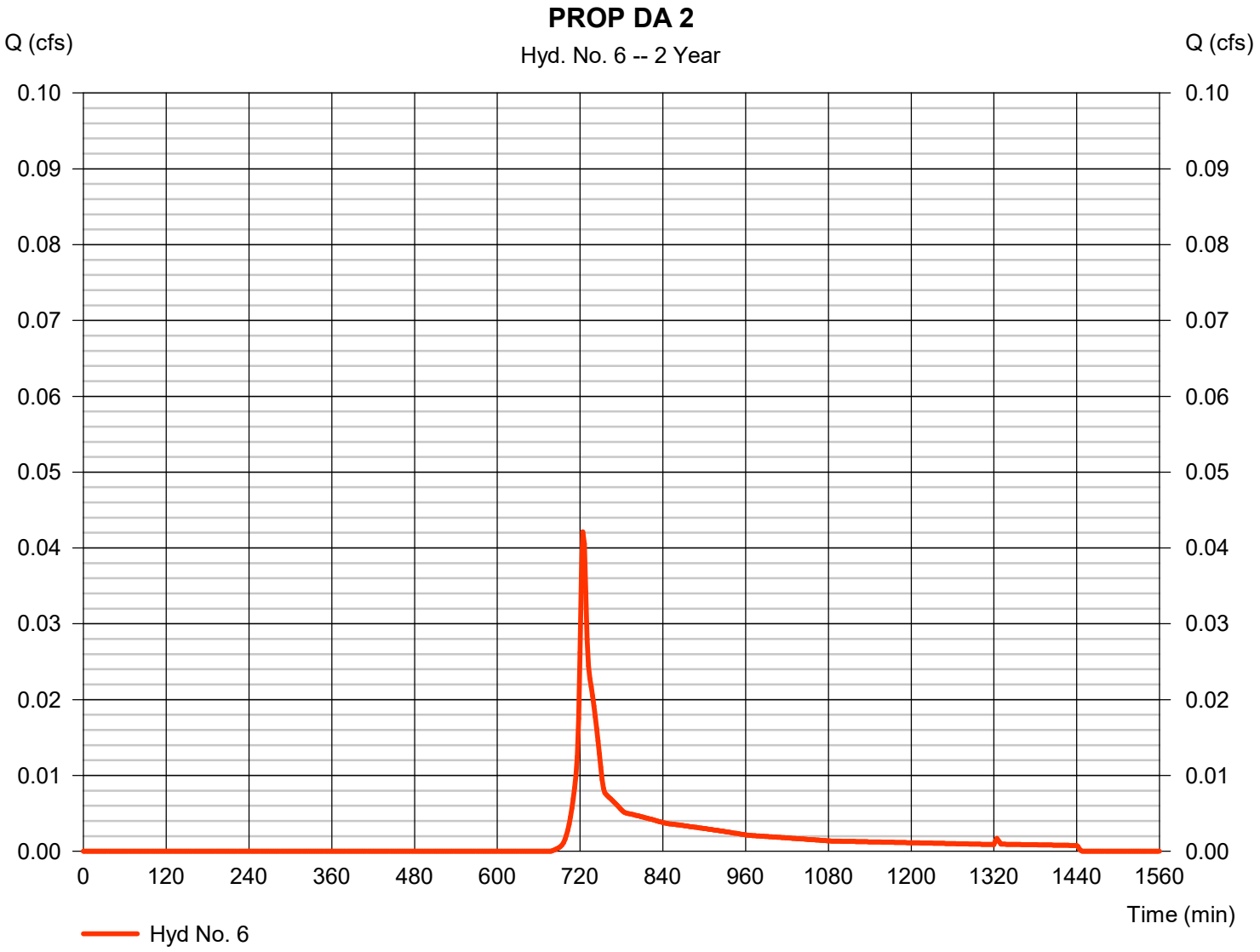


Hydrograph Report

Hyd. No. 6

PROP DA 2

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.042 cfs
Storm frequency	=	2 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	141 cuft
Drainage area	=	0.049 ac	Curve number	=	69
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.32 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

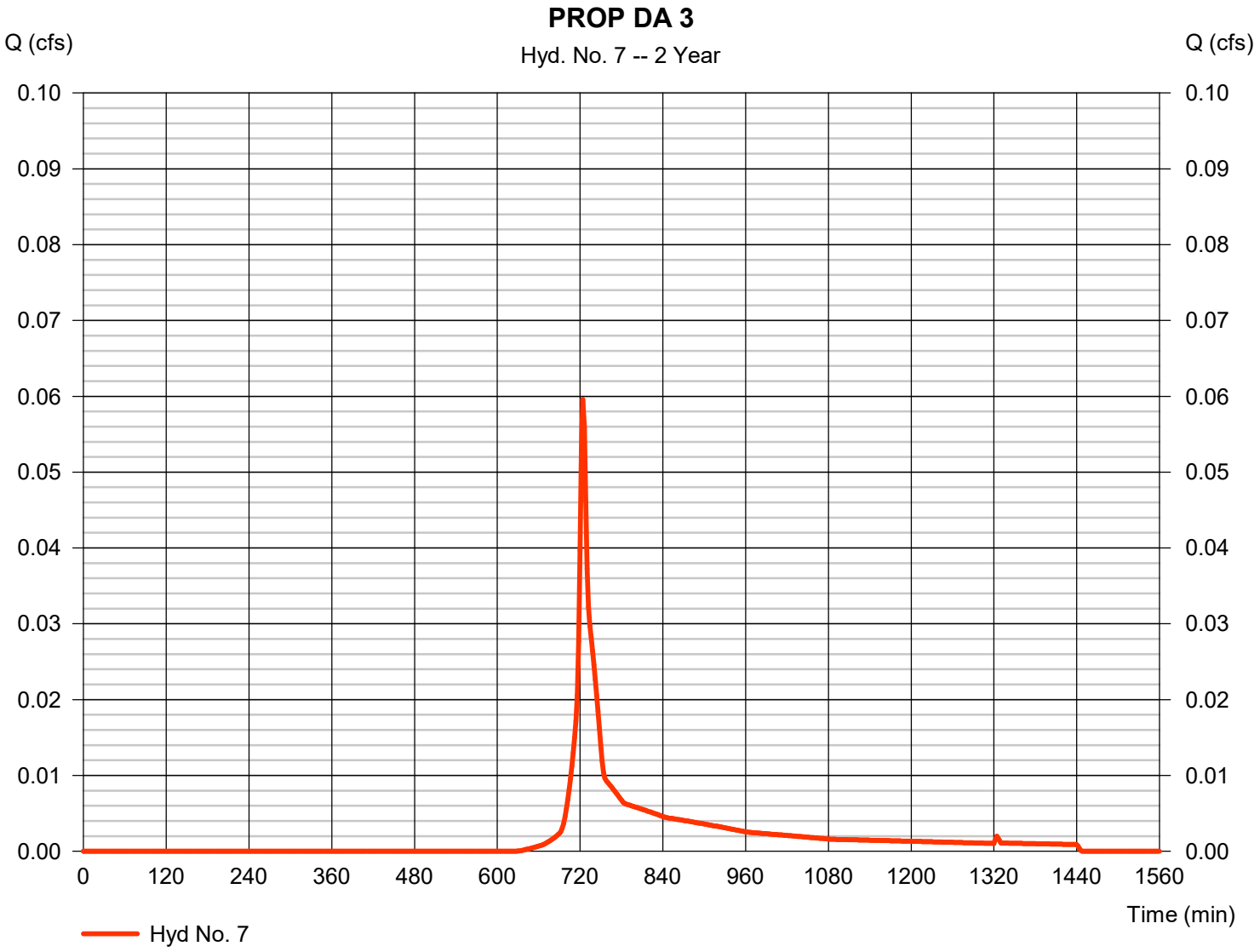


Hydrograph Report

Hyd. No. 7

PROP DA 3

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.060 cfs
Storm frequency	=	2 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	186 cuft
Drainage area	=	0.049 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.32 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

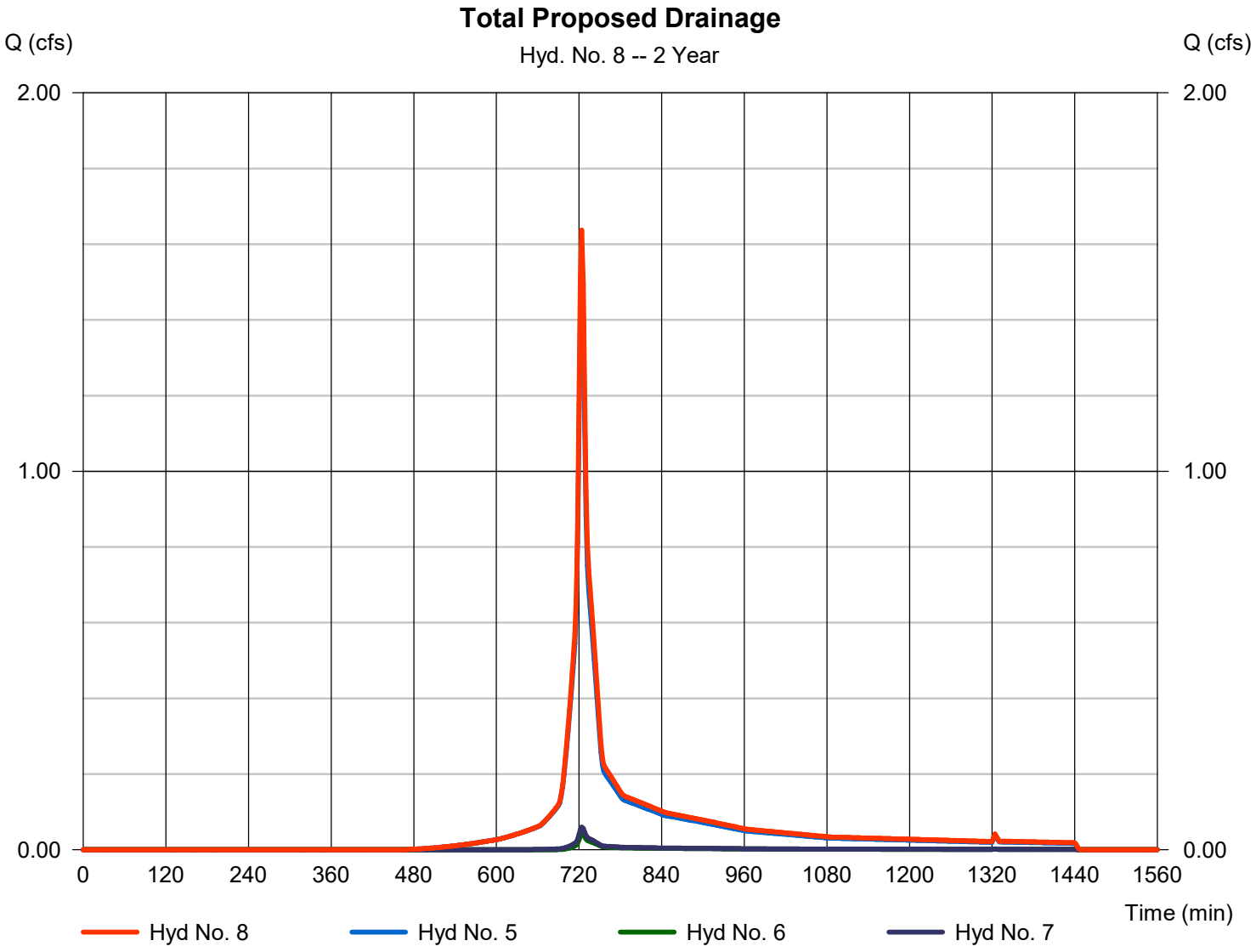


Hydrograph Report

Hyd. No. 8

Total Proposed Drainage

Hydrograph type	= Combine	Peak discharge	= 1.637 cfs
Storm frequency	= 2 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 4,918 cuft
Inflow hyds.	= 5, 6, 7	Contrib. drain. area	= 0.823 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

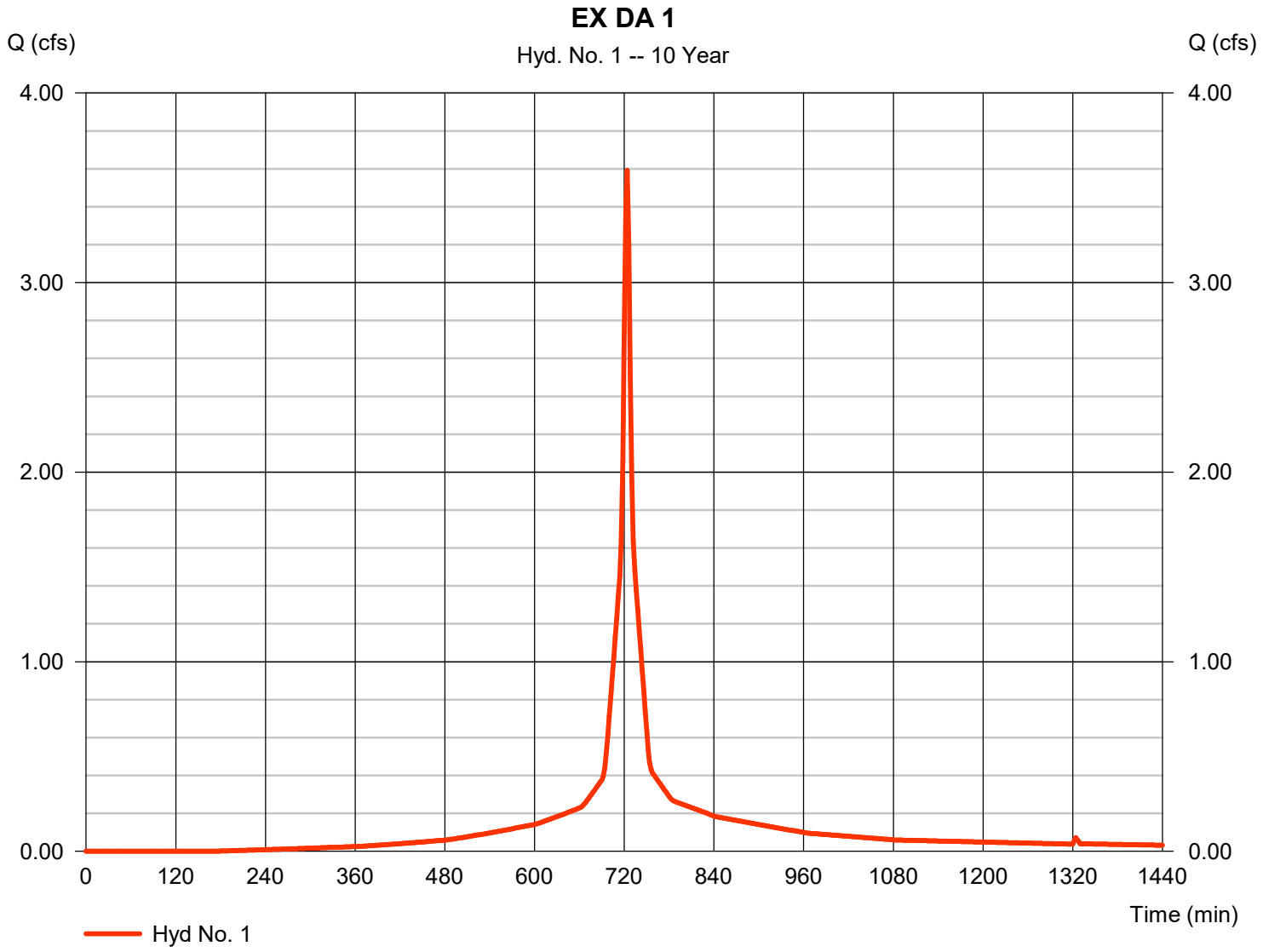
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	3.592	2	724	11,542	------	------	------	EX DA 1
2	SCS Runoff	0.119	2	724	357	------	------	------	EX DA 2
3	SCS Runoff	0.117	2	724	349	------	------	------	EX DA 3
4	Combine	3.828	2	724	12,248	1, 2, 3	------	------	Total Existing Drainage
5	SCS Runoff	2.984	2	724	9,065	------	------	------	PROP DA 1
6	SCS Runoff	0.121	2	724	367	------	------	------	PROP DA 2
7	SCS Runoff	0.146	2	724	439	------	------	------	PROP DA 3
8	Combine	3.252	2	724	9,871	5, 6, 7	------	------	Total Proposed Drainage

Hydrograph Report

Hyd. No. 1

EX DA 1

Hydrograph type	=	SCS Runoff	Peak discharge	=	3.592 cfs
Storm frequency	=	10 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	11,542 cuft
Drainage area	=	0.750 ac	Curve number	=	93
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	5.33 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

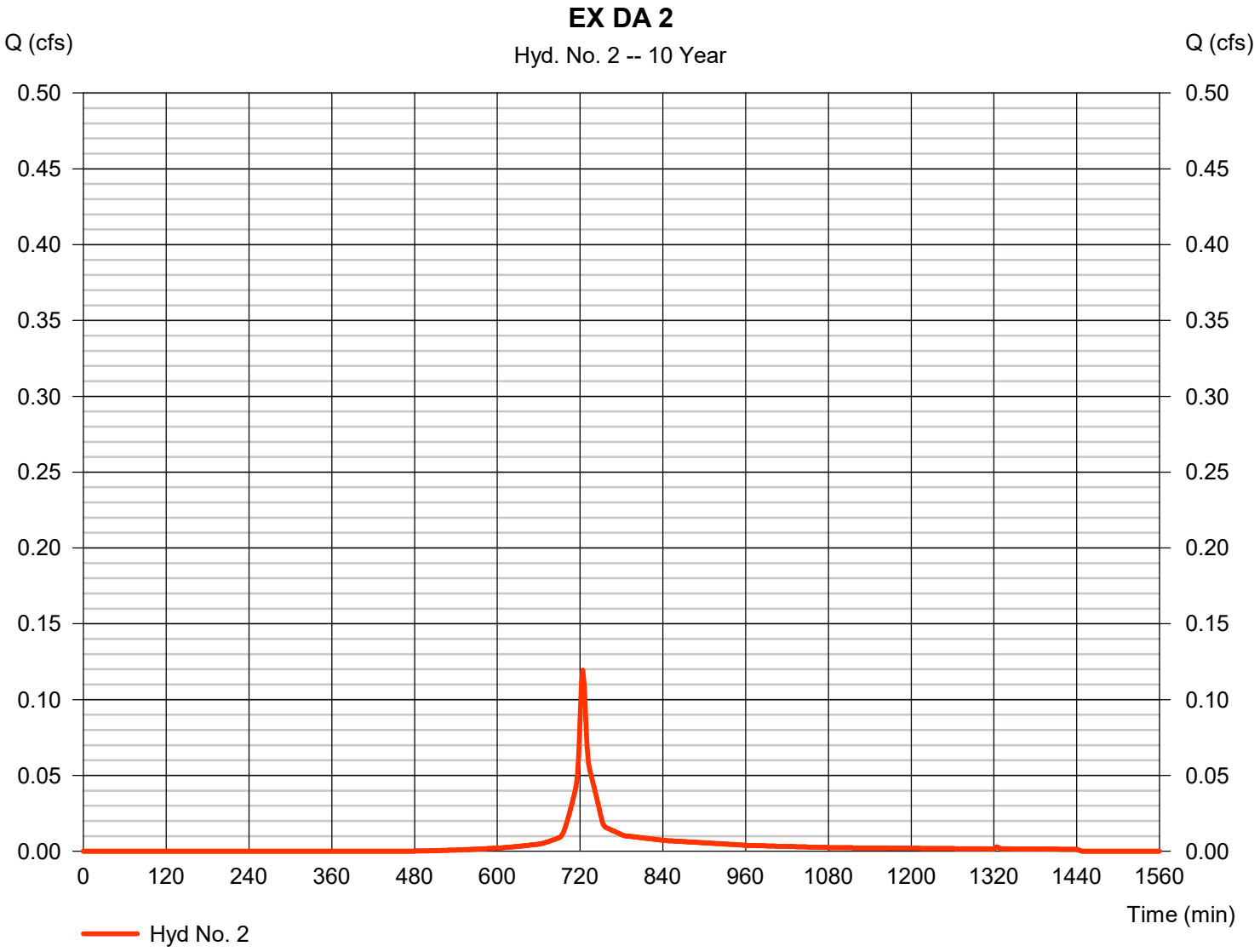


Hydrograph Report

Hyd. No. 2

EX DA 2

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.119 cfs
Storm frequency	=	10 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	357 cuft
Drainage area	=	0.035 ac	Curve number	=	78
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	5.33 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

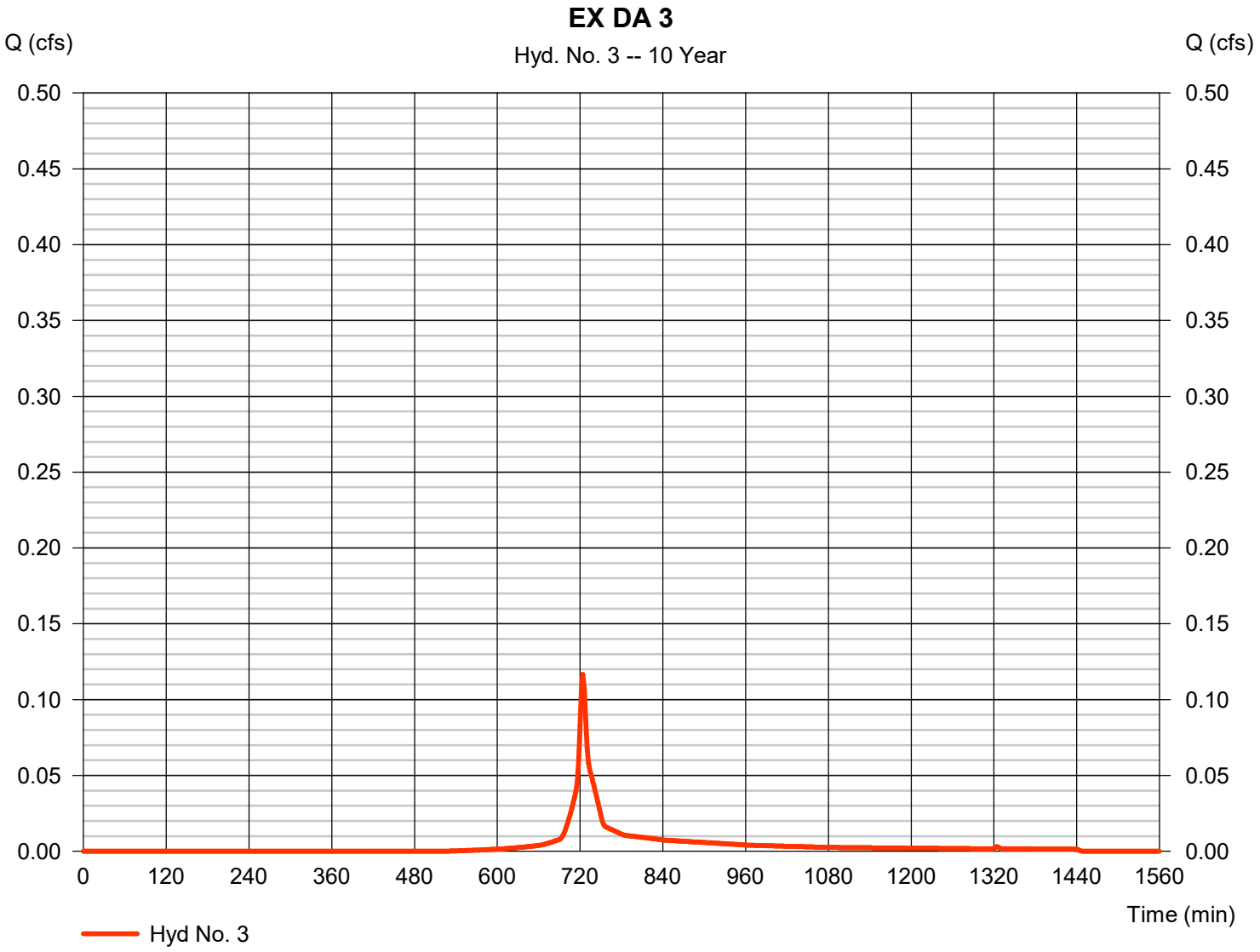


Hydrograph Report

Hyd. No. 3

EX DA 3

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.117 cfs
Storm frequency	=	10 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	349 cuft
Drainage area	=	0.039 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	5.33 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

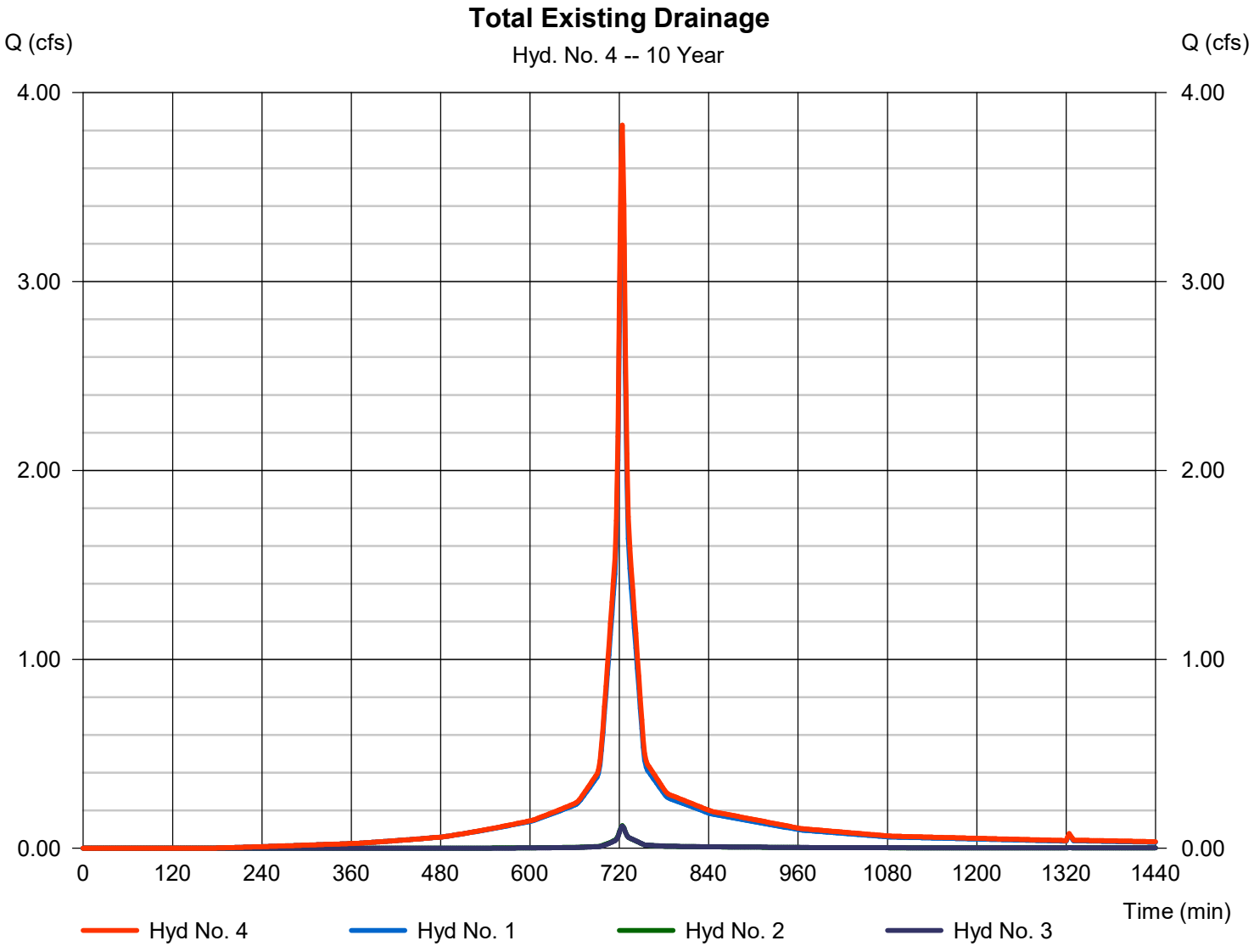


Hydrograph Report

Hyd. No. 4

Total Existing Drainage

Hydrograph type	= Combine	Peak discharge	= 3.828 cfs
Storm frequency	= 10 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 12,248 cuft
Inflow hyds.	= 1, 2, 3	Contrib. drain. area	= 0.824 ac

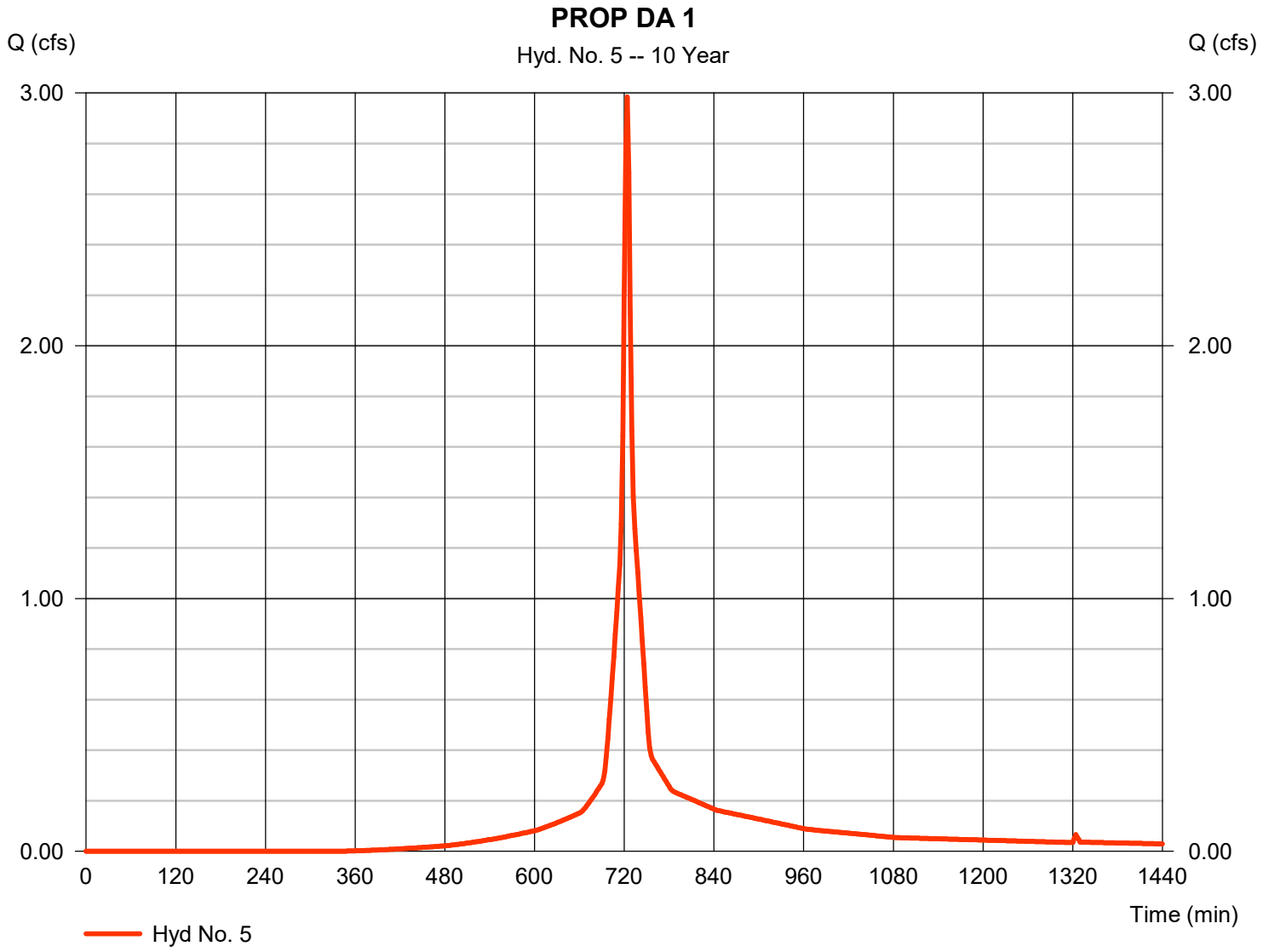


Hydrograph Report

Hyd. No. 5

PROP DA 1

Hydrograph type	= SCS Runoff	Peak discharge	= 2.984 cfs
Storm frequency	= 10 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 9,065 cuft
Drainage area	= 0.725 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 5.33 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

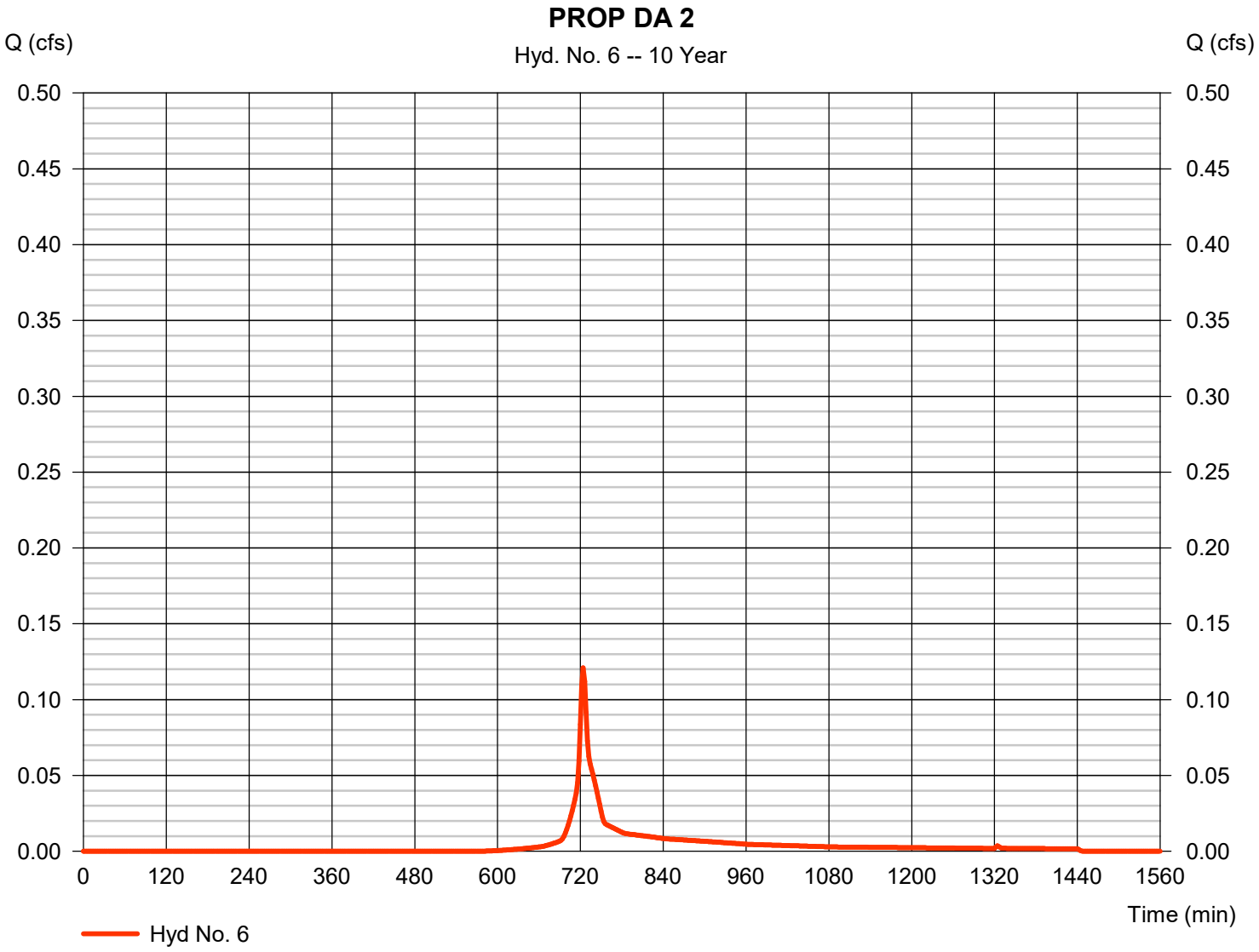


Hydrograph Report

Hyd. No. 6

PROP DA 2

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.121 cfs
Storm frequency	=	10 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	367 cuft
Drainage area	=	0.049 ac	Curve number	=	69
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	5.33 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

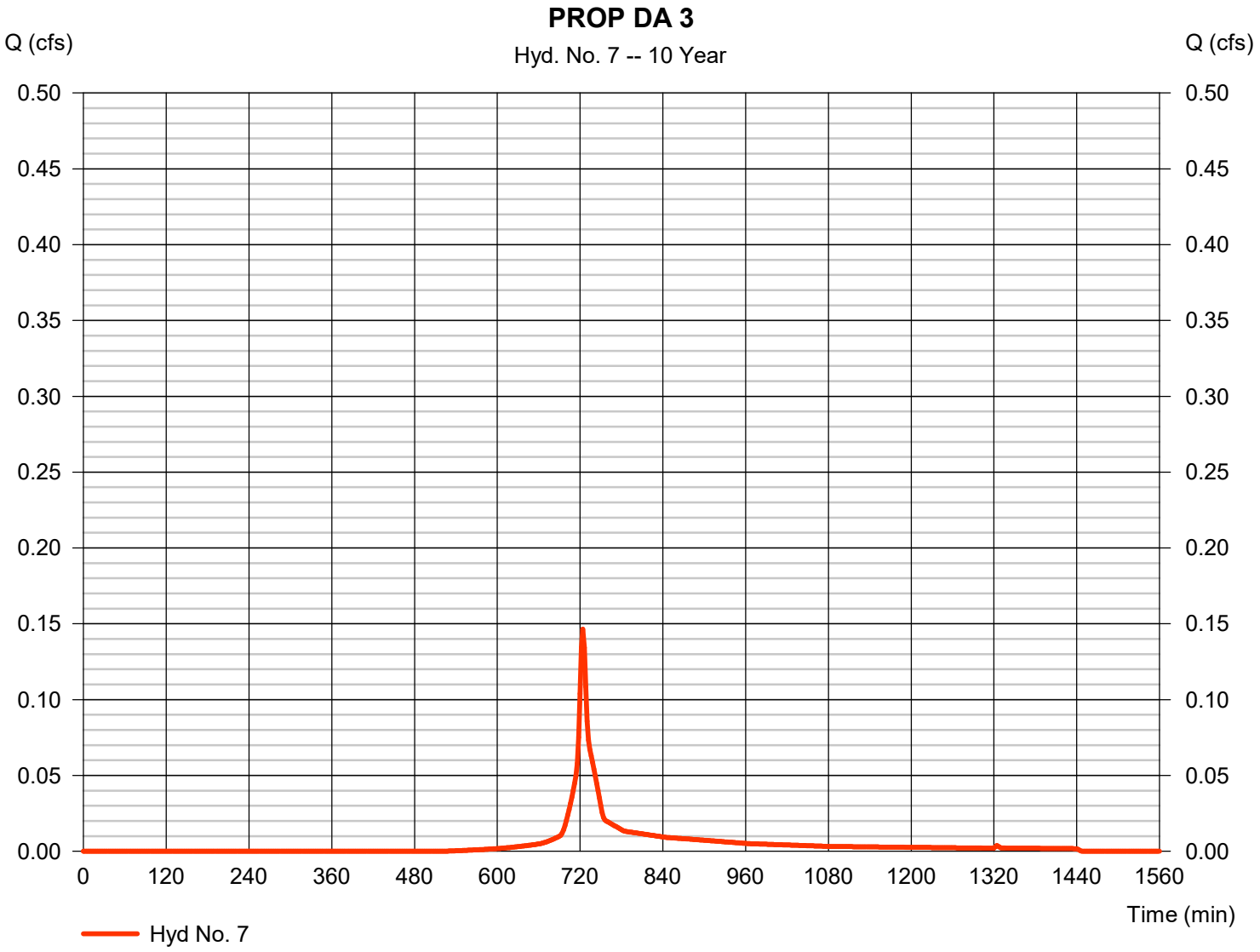


Hydrograph Report

Hyd. No. 7

PROP DA 3

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.146 cfs
Storm frequency	=	10 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	439 cuft
Drainage area	=	0.049 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	5.33 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

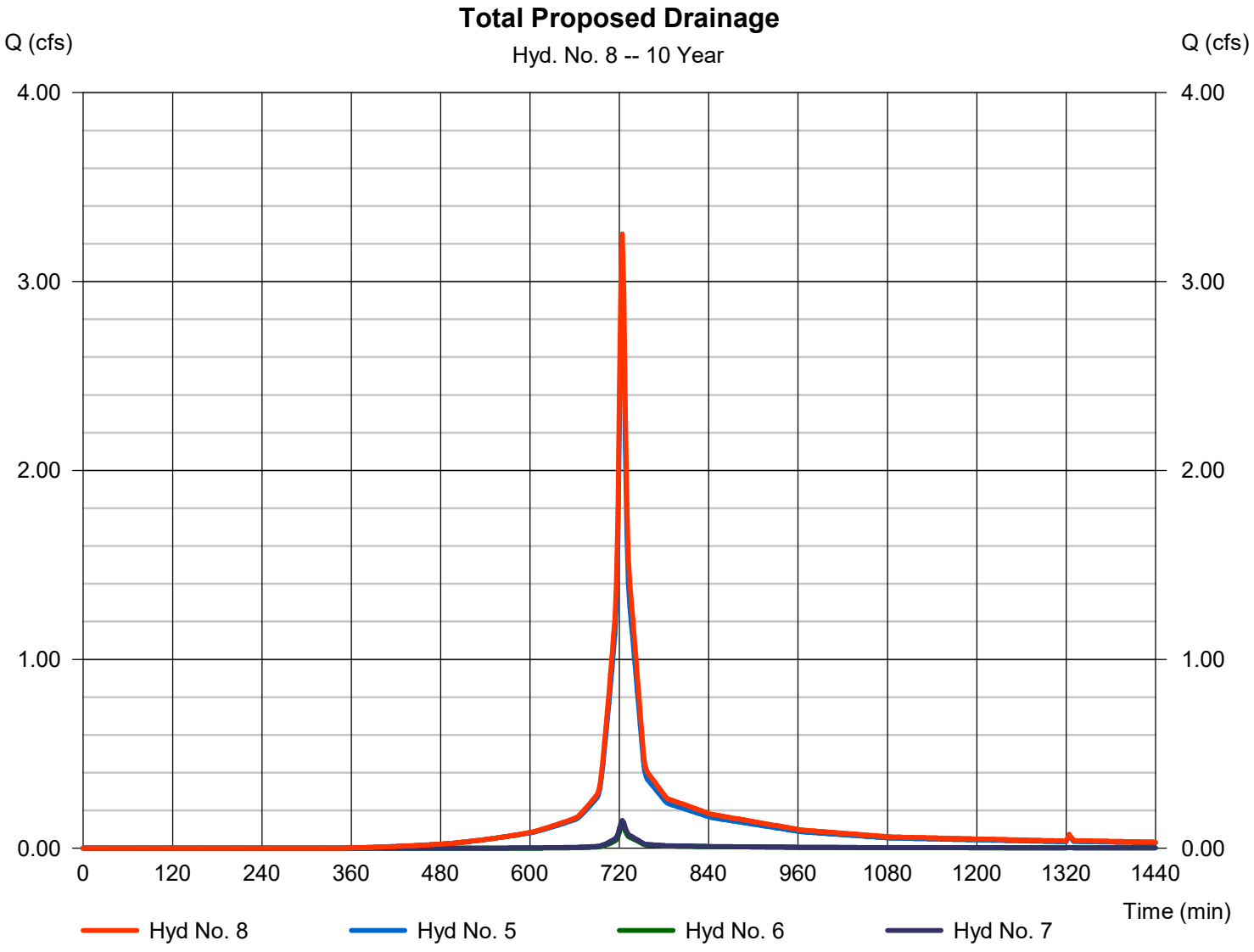


Hydrograph Report

Hyd. No. 8

Total Proposed Drainage

Hydrograph type	= Combine	Peak discharge	= 3.252 cfs
Storm frequency	= 10 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 9,871 cuft
Inflow hyds.	= 5, 6, 7	Contrib. drain. area	= 0.823 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

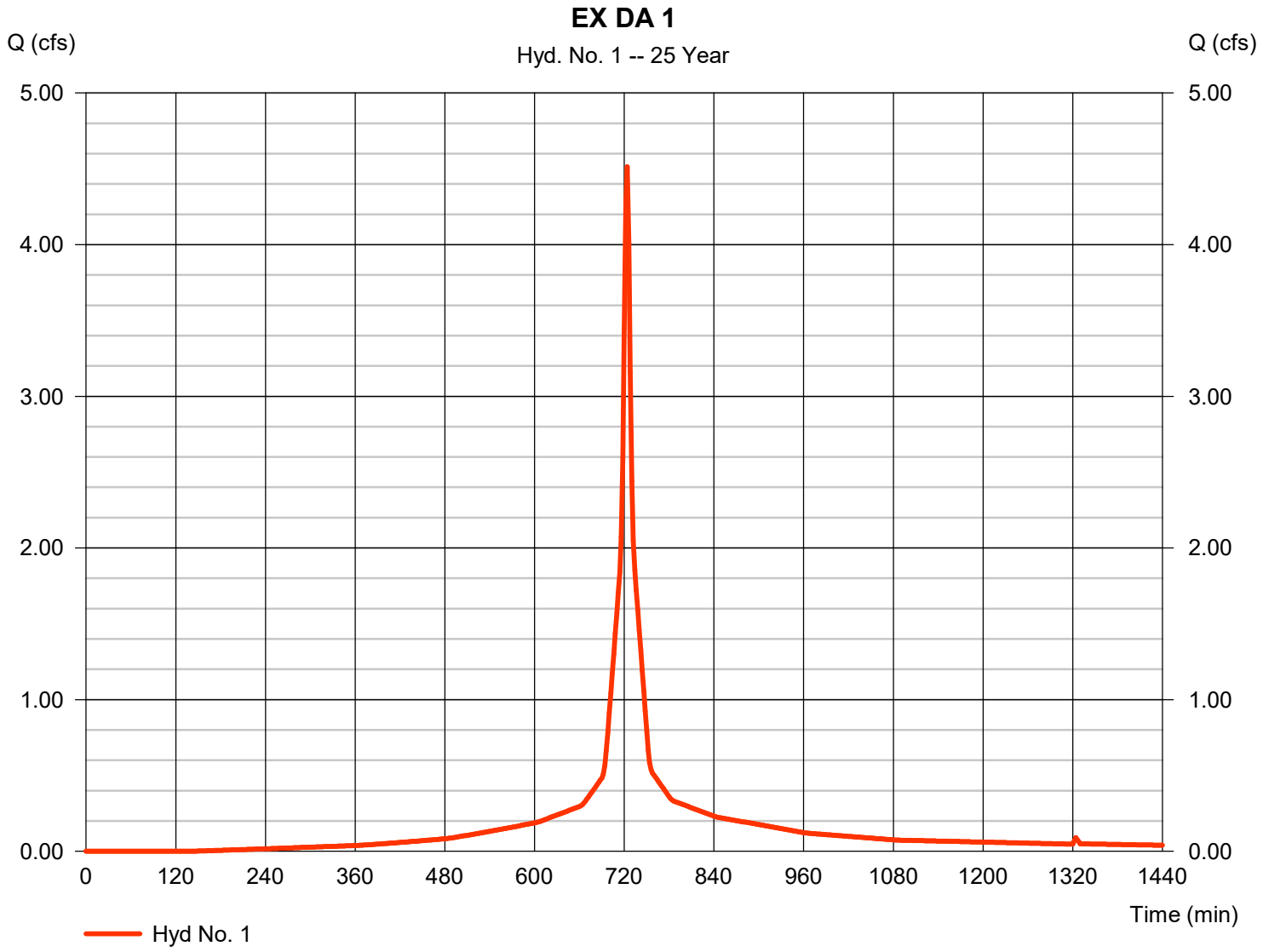
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	4.514	2	724	14,716	------	------	------	EX DA 1
2	SCS Runoff	0.163	2	724	489	------	------	------	EX DA 2
3	SCS Runoff	0.164	2	724	489	------	------	------	EX DA 3
4	Combine	4.841	2	724	15,694	1, 2, 3	------	------	Total Existing Drainage
5	SCS Runoff	3.900	2	724	11,995	------	------	------	PROP DA 1
6	SCS Runoff	0.177	2	724	530	------	------	------	PROP DA 2
7	SCS Runoff	0.206	2	724	615	------	------	------	PROP DA 3
8	Combine	4.283	2	724	13,140	5, 6, 7	------	------	Total Proposed Drainage

Hydrograph Report

Hyd. No. 1

EX DA 1

Hydrograph type	=	SCS Runoff	Peak discharge	=	4.514 cfs
Storm frequency	=	25 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	14,716 cuft
Drainage area	=	0.750 ac	Curve number	=	93
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	6.59 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

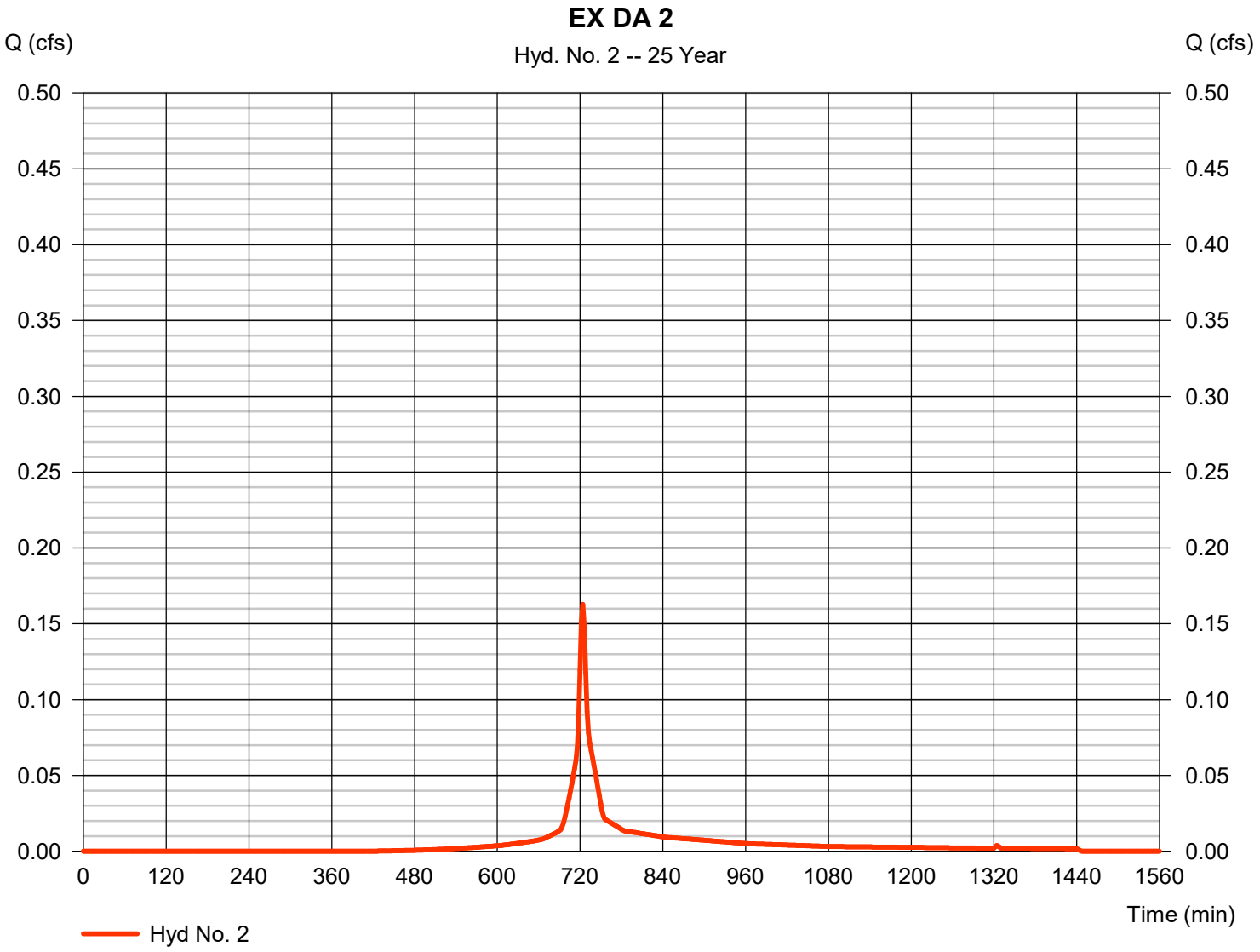


Hydrograph Report

Hyd. No. 2

EX DA 2

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.163 cfs
Storm frequency	=	25 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	489 cuft
Drainage area	=	0.035 ac	Curve number	=	78
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	6.59 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

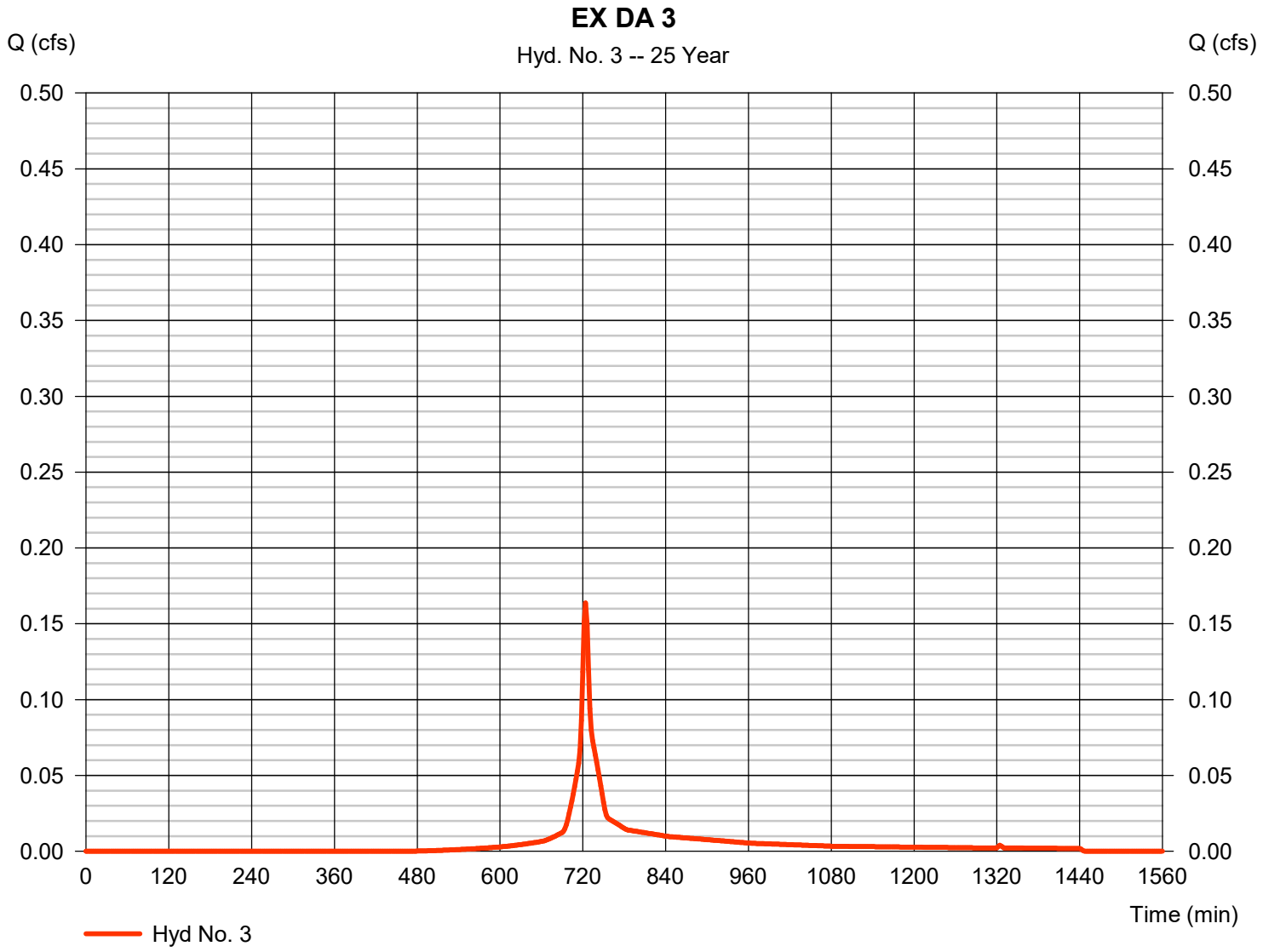


Hydrograph Report

Hyd. No. 3

EX DA 3

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.164 cfs
Storm frequency	=	25 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	489 cuft
Drainage area	=	0.039 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	6.59 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

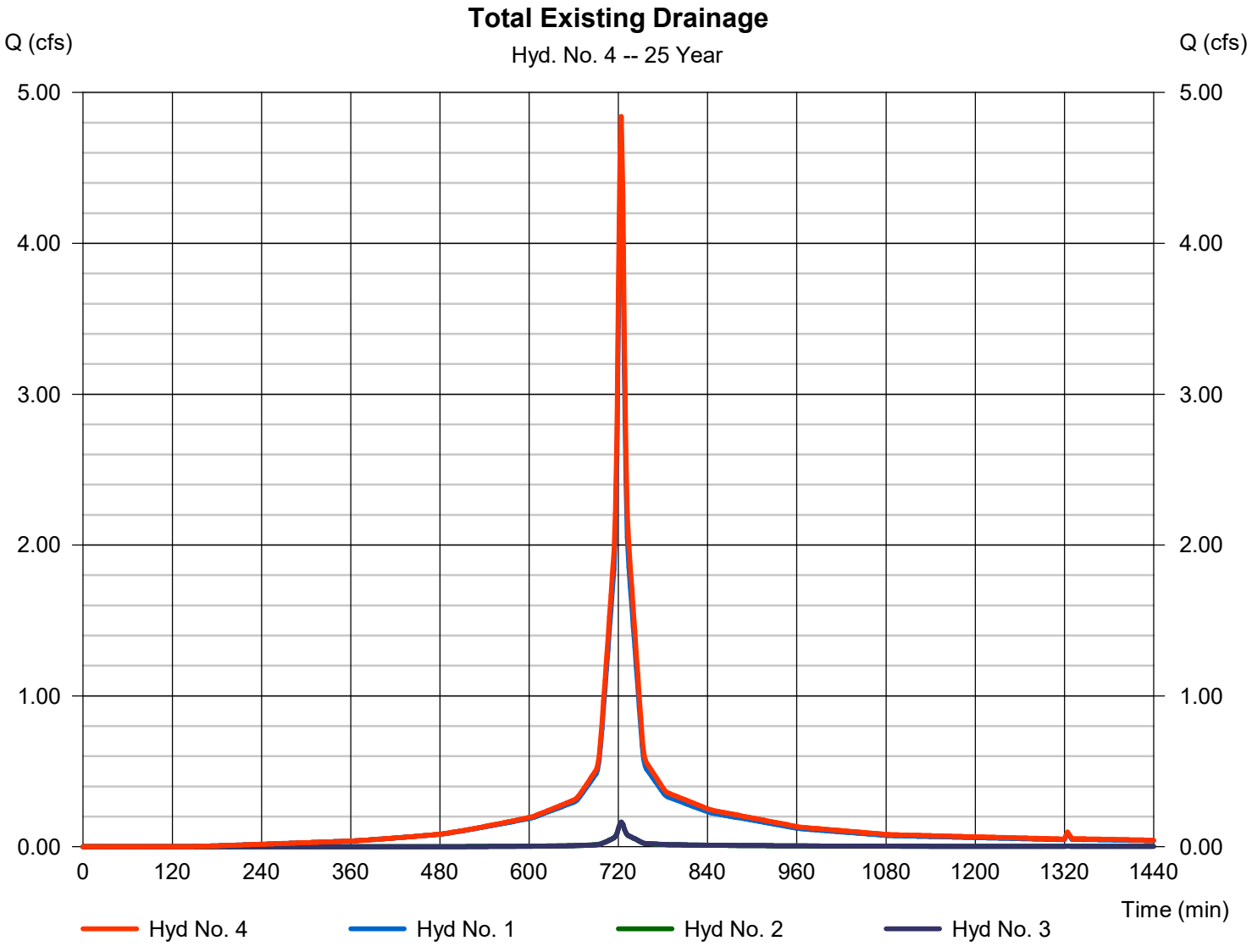


Hydrograph Report

Hyd. No. 4

Total Existing Drainage

Hydrograph type	= Combine	Peak discharge	= 4.841 cfs
Storm frequency	= 25 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 15,694 cuft
Inflow hyds.	= 1, 2, 3	Contrib. drain. area	= 0.824 ac

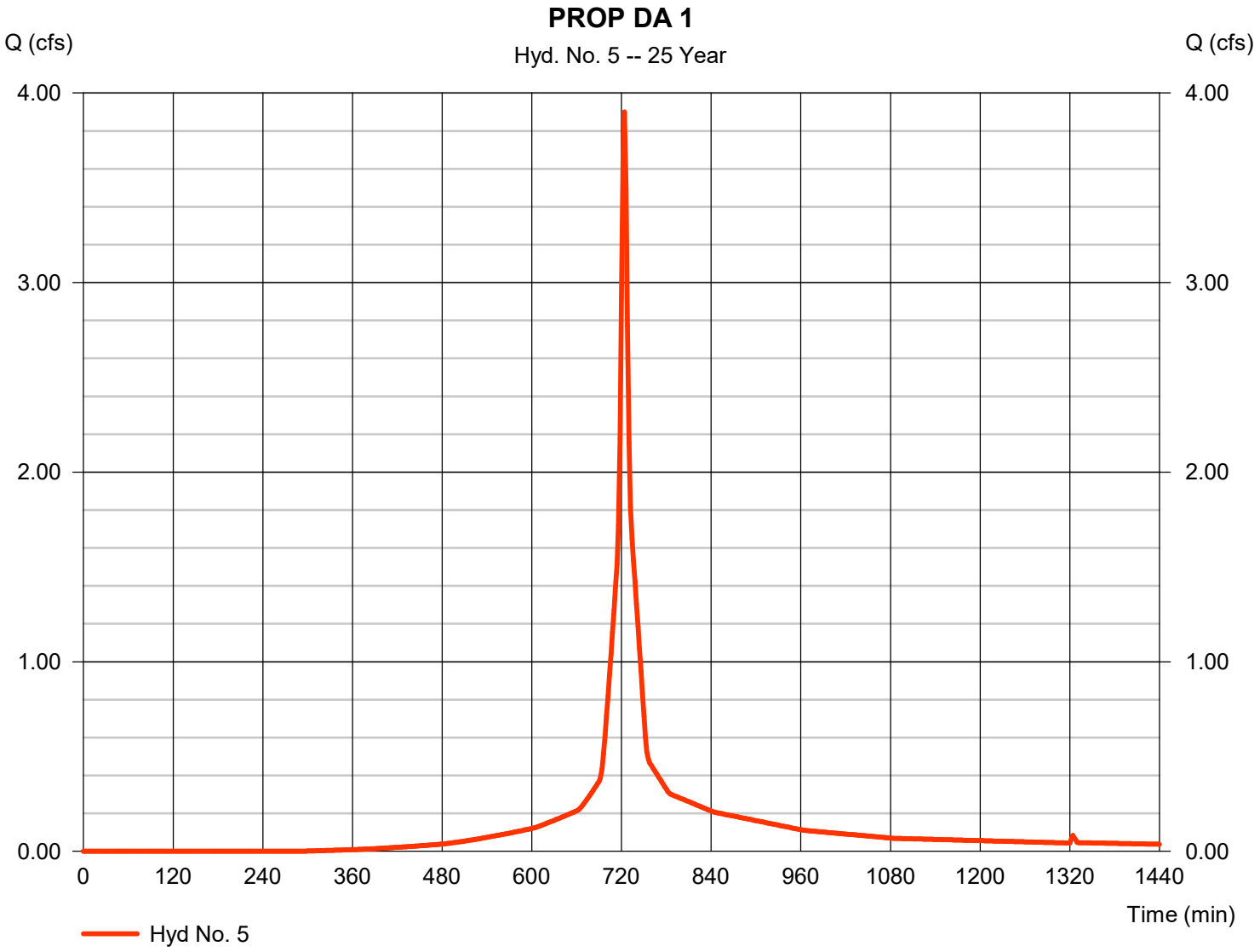


Hydrograph Report

Hyd. No. 5

PROP DA 1

Hydrograph type	=	SCS Runoff	Peak discharge	=	3.900 cfs
Storm frequency	=	25 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	11,995 cuft
Drainage area	=	0.725 ac	Curve number	=	85
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	6.59 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

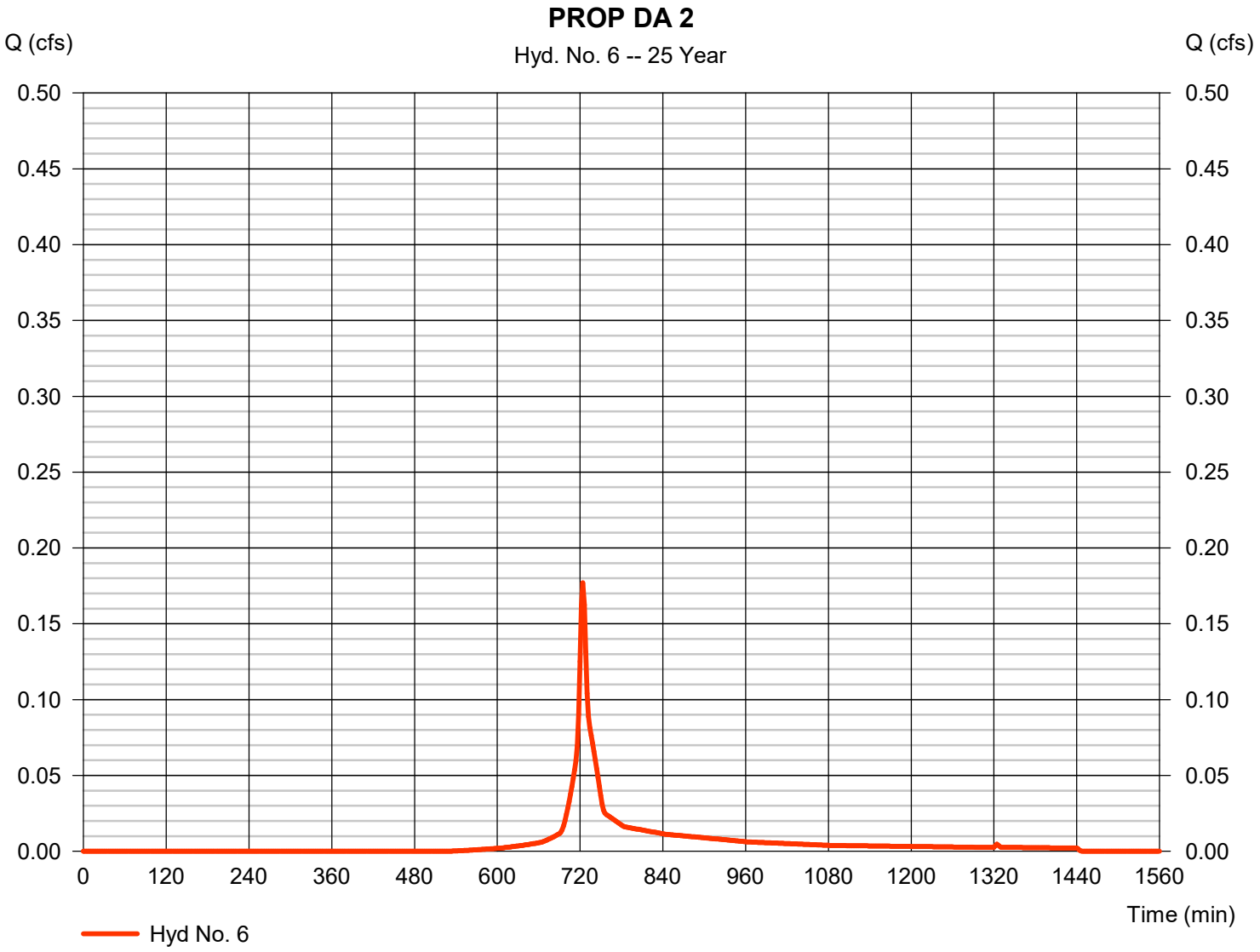


Hydrograph Report

Hyd. No. 6

PROP DA 2

Hydrograph type	= SCS Runoff	Peak discharge	= 0.177 cfs
Storm frequency	= 25 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 530 cuft
Drainage area	= 0.049 ac	Curve number	= 69
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 6.59 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

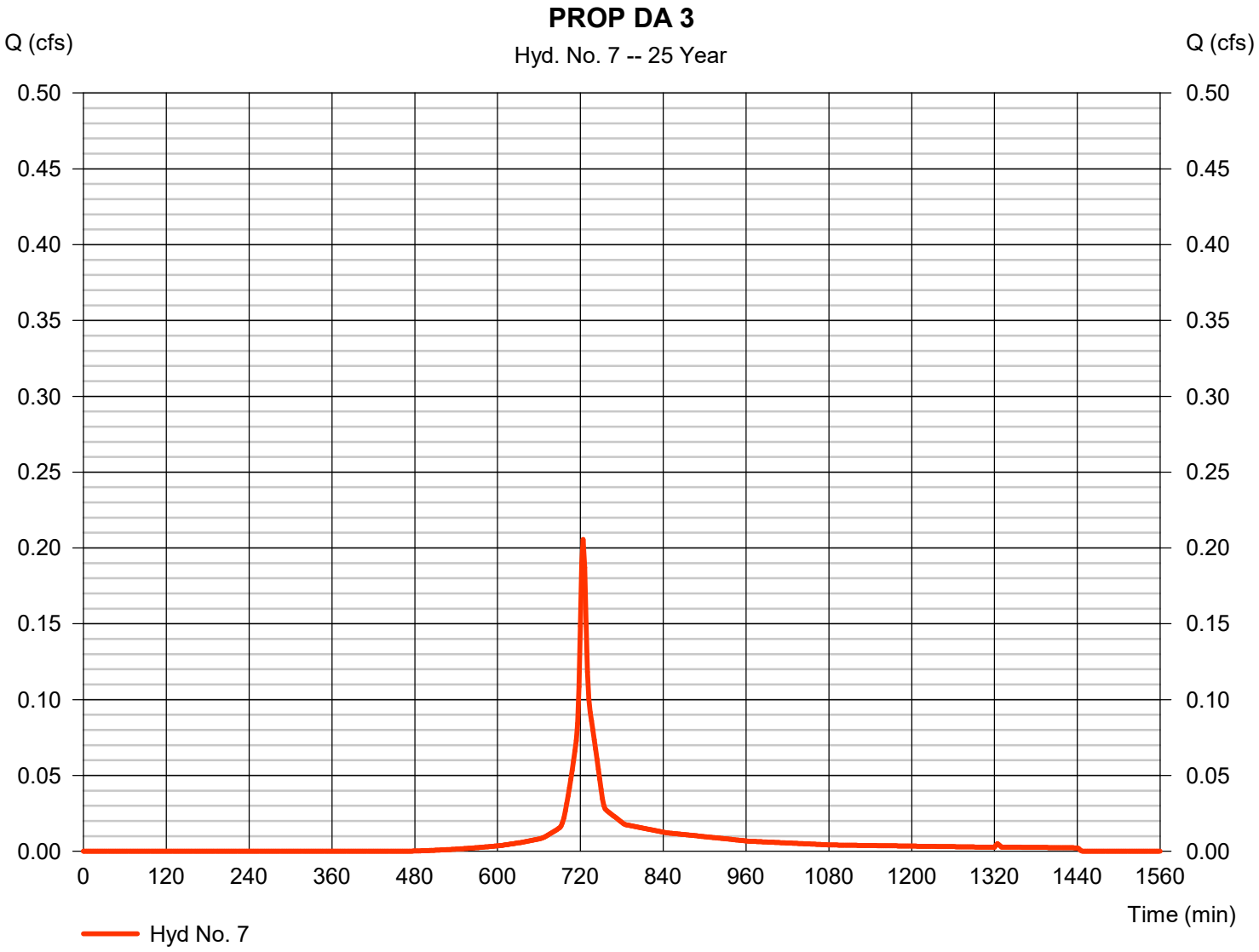


Hydrograph Report

Hyd. No. 7

PROP DA 3

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.206 cfs
Storm frequency	=	25 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	615 cuft
Drainage area	=	0.049 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	6.59 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

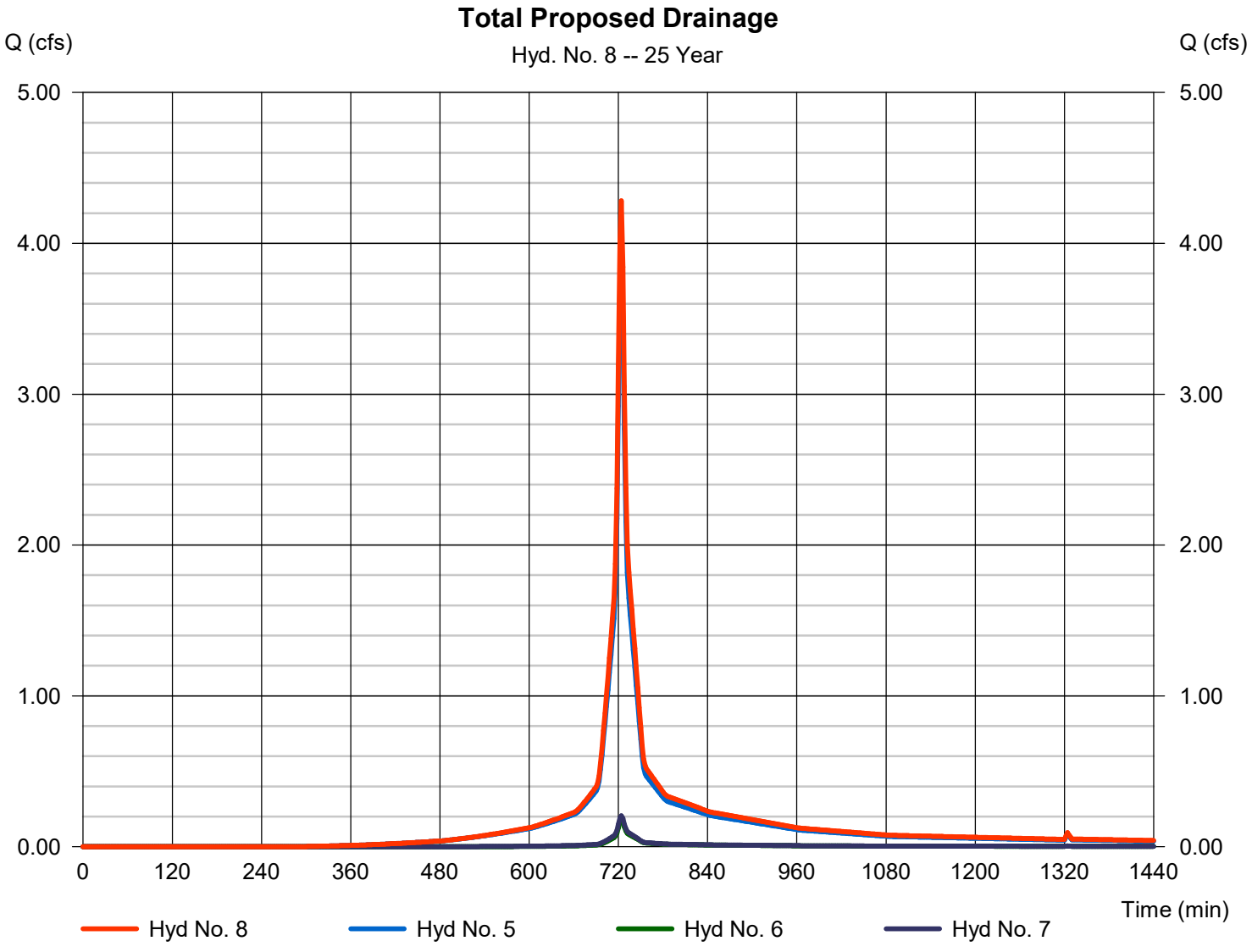


Hydrograph Report

Hyd. No. 8

Total Proposed Drainage

Hydrograph type	= Combine	Peak discharge	= 4.283 cfs
Storm frequency	= 25 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 13,140 cuft
Inflow hyds.	= 5, 6, 7	Contrib. drain. area	= 0.823 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

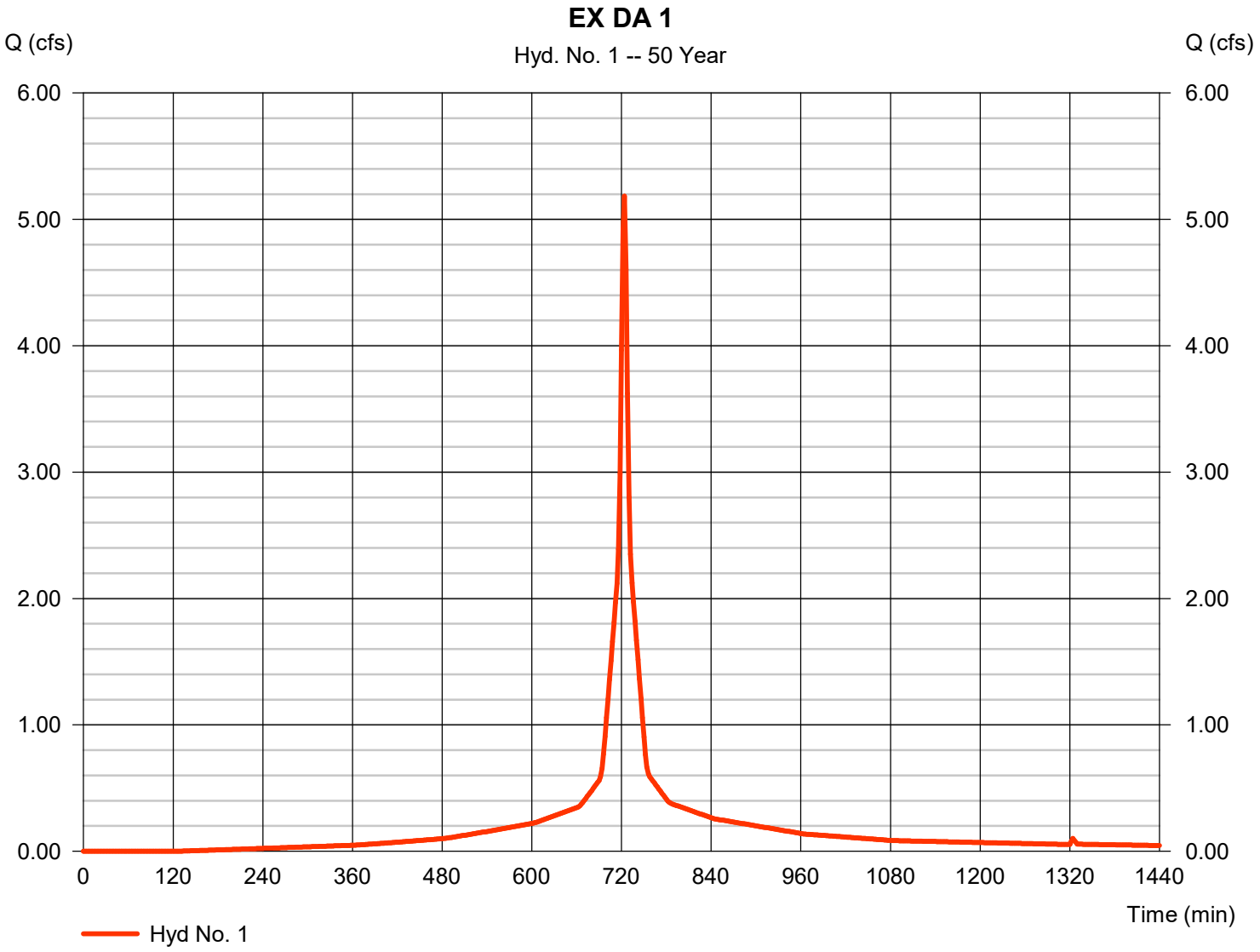
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	5.184	2	724	17,041	------	------	------	EX DA 1
2	SCS Runoff	0.195	2	724	588	------	------	------	EX DA 2
3	SCS Runoff	0.199	2	724	596	------	------	------	EX DA 3
4	Combine	5.578	2	724	18,225	1, 2, 3	------	------	Total Existing Drainage
5	SCS Runoff	4.567	2	724	14,166	------	------	------	PROP DA 1
6	SCS Runoff	0.220	2	724	656	------	------	------	PROP DA 2
7	SCS Runoff	0.250	2	724	749	------	------	------	PROP DA 3
8	Combine	5.037	2	724	15,571	5, 6, 7	------	------	Total Proposed Drainage

Hydrograph Report

Hyd. No. 1

EX DA 1

Hydrograph type	=	SCS Runoff	Peak discharge	=	5.184 cfs
Storm frequency	=	50 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	17,041 cuft
Drainage area	=	0.750 ac	Curve number	=	93
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	7.51 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

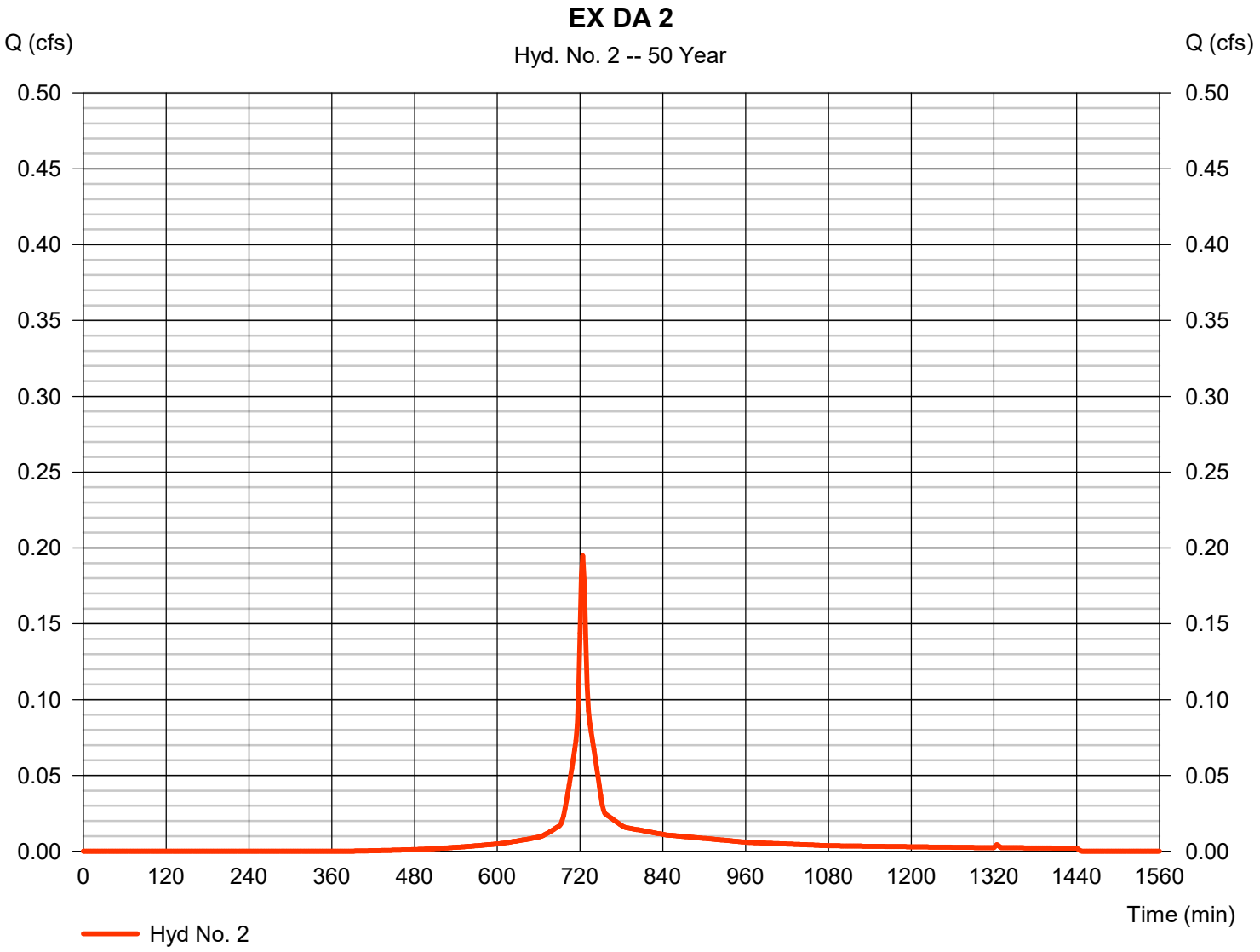


Hydrograph Report

Hyd. No. 2

EX DA 2

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.195 cfs
Storm frequency	=	50 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	588 cuft
Drainage area	=	0.035 ac	Curve number	=	78
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	7.51 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

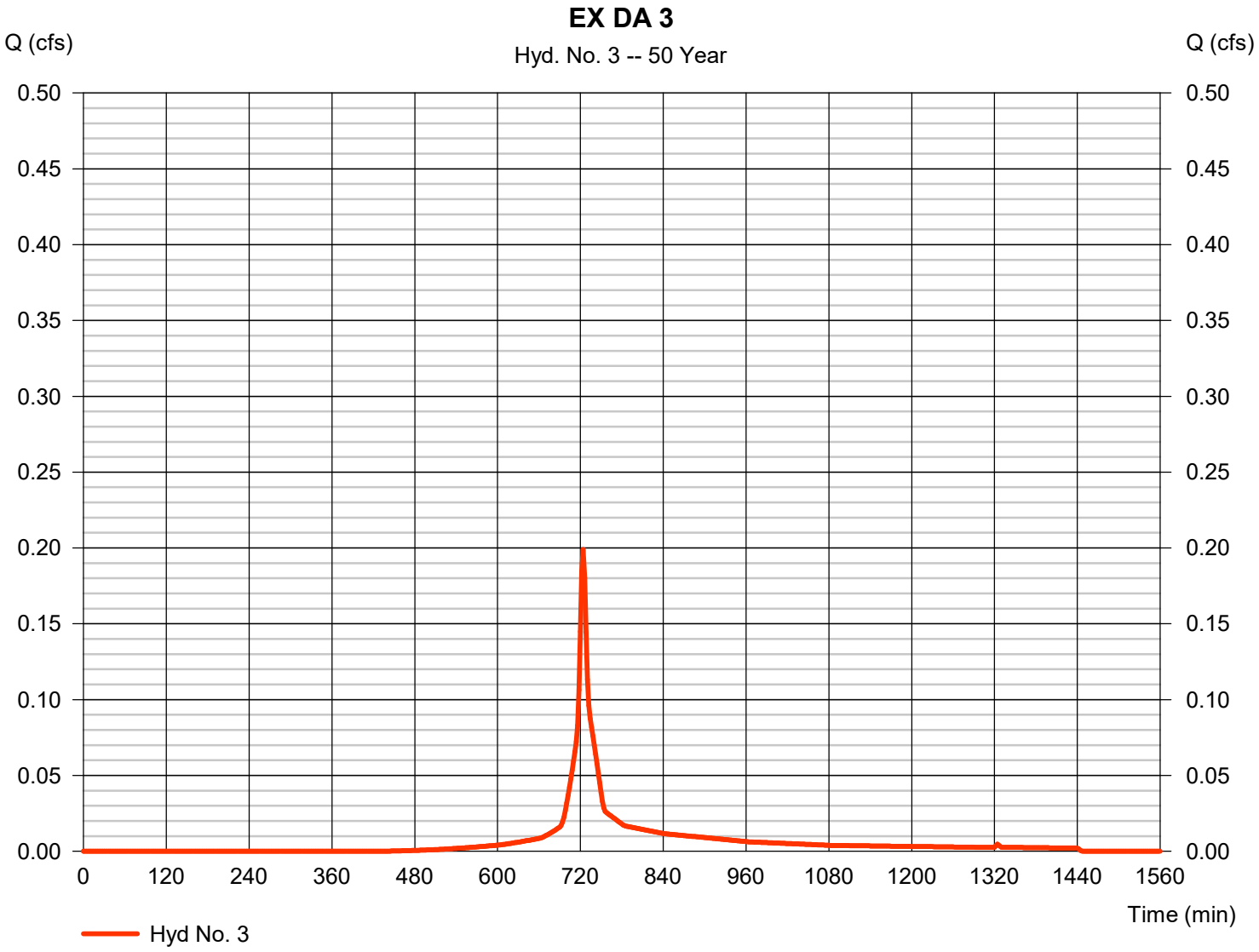


Hydrograph Report

Hyd. No. 3

EX DA 3

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.199 cfs
Storm frequency	=	50 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	596 cuft
Drainage area	=	0.039 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	7.51 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

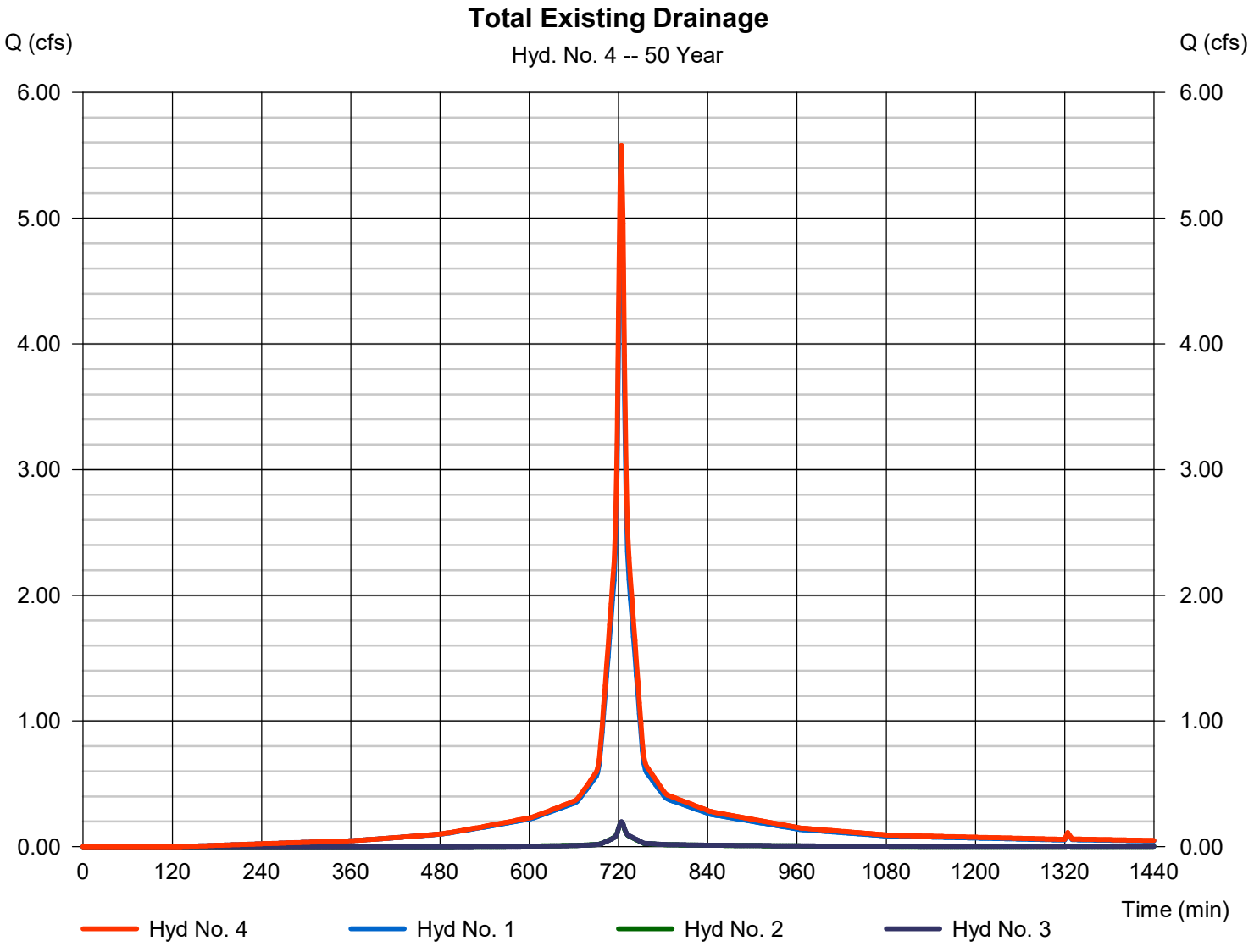


Hydrograph Report

Hyd. No. 4

Total Existing Drainage

Hydrograph type	= Combine	Peak discharge	= 5.578 cfs
Storm frequency	= 50 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 18,225 cuft
Inflow hyds.	= 1, 2, 3	Contrib. drain. area	= 0.824 ac

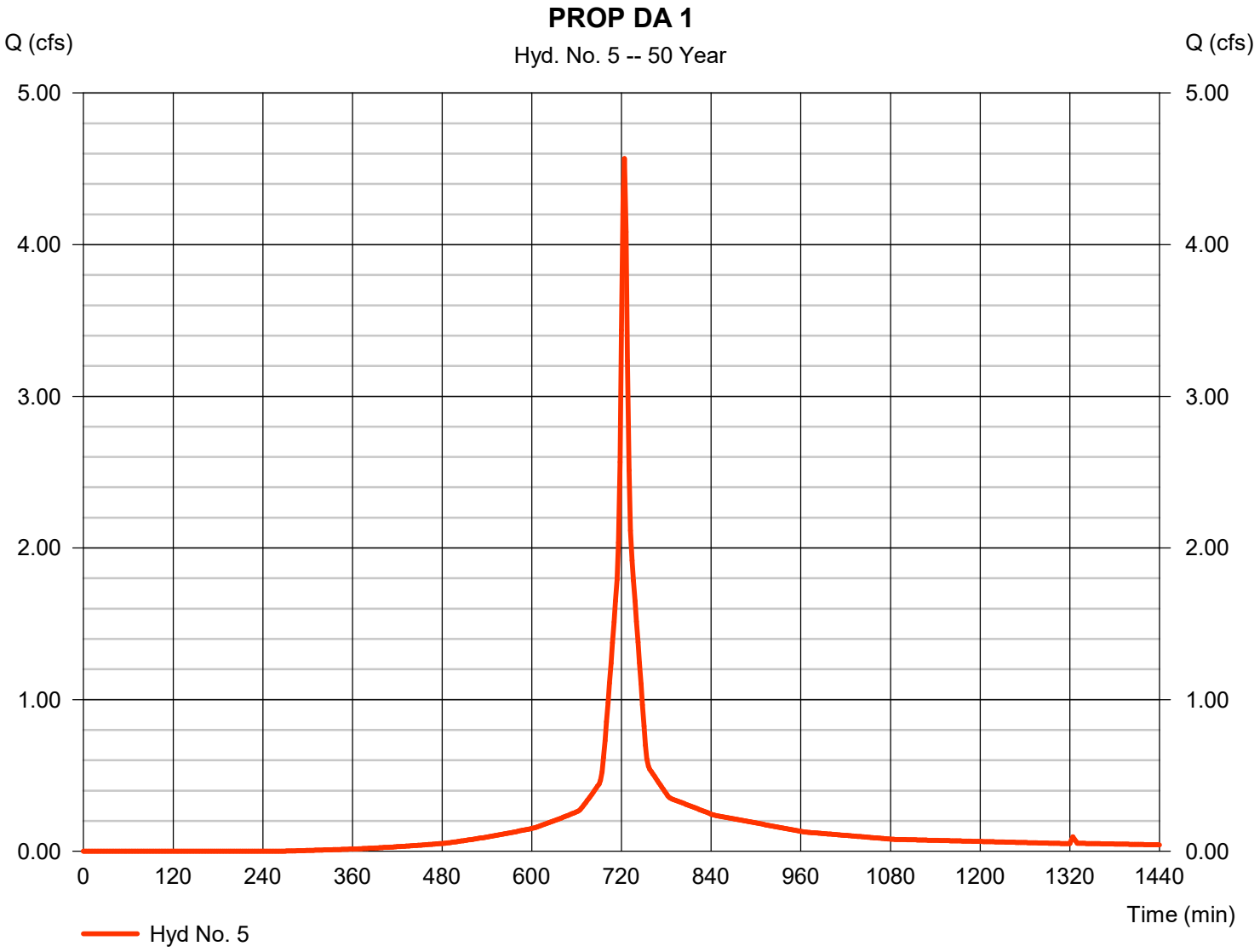


Hydrograph Report

Hyd. No. 5

PROP DA 1

Hydrograph type	=	SCS Runoff	Peak discharge	=	4.567 cfs
Storm frequency	=	50 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	14,166 cuft
Drainage area	=	0.725 ac	Curve number	=	85
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	7.51 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

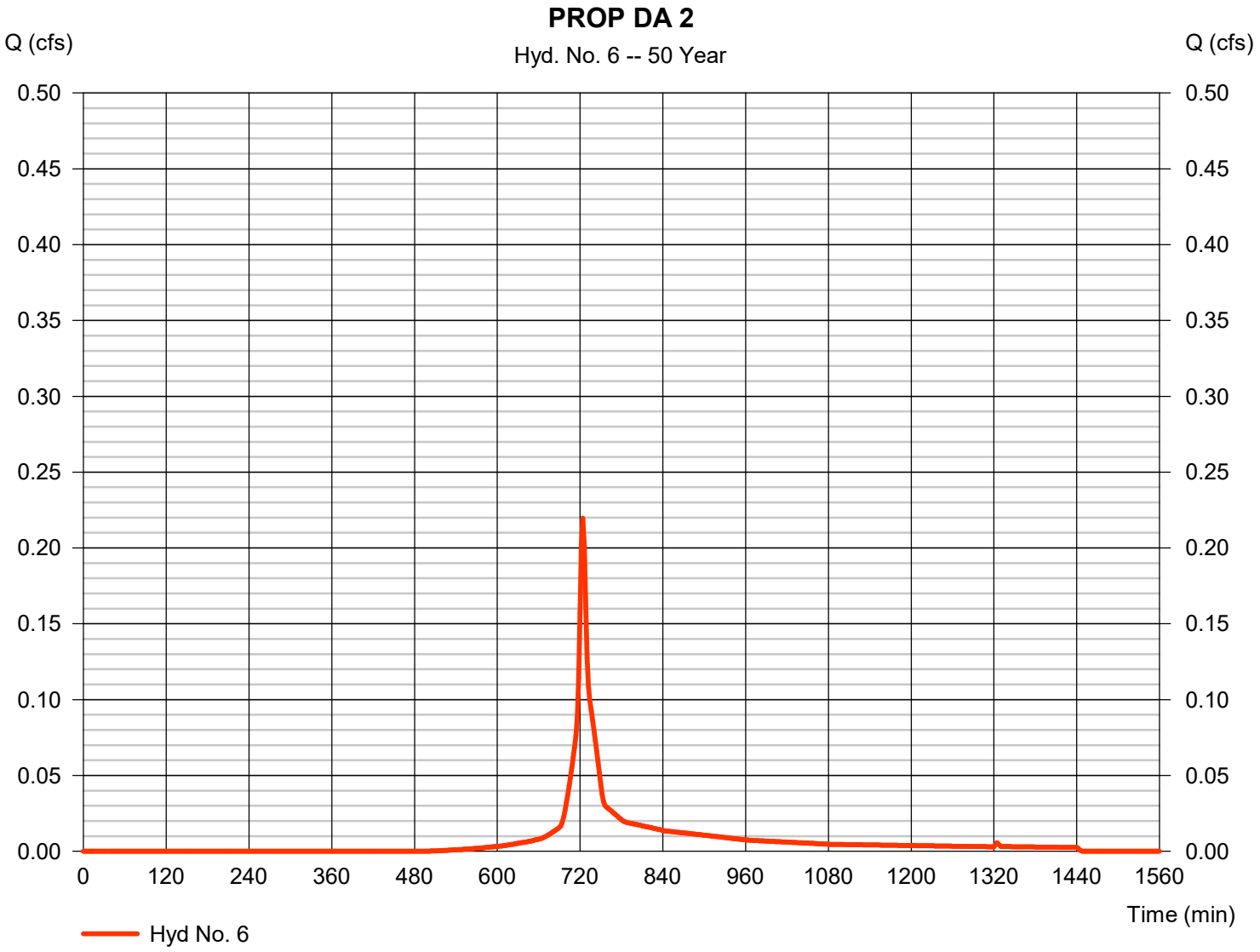


Hydrograph Report

Hyd. No. 6

PROP DA 2

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.220 cfs
Storm frequency	=	50 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	656 cuft
Drainage area	=	0.049 ac	Curve number	=	69
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	7.51 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

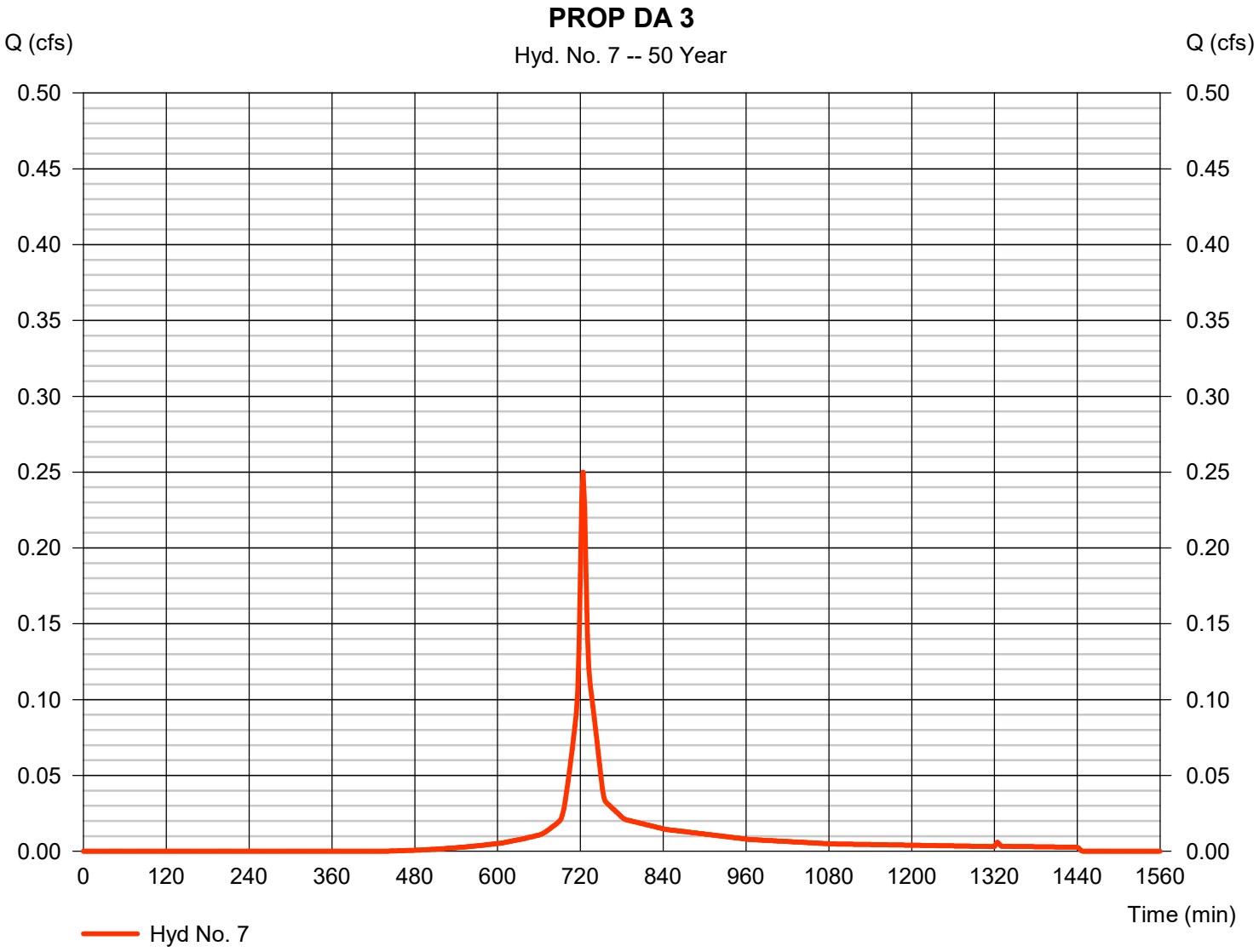


Hydrograph Report

Hyd. No. 7

PROP DA 3

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.250 cfs
Storm frequency	=	50 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	749 cuft
Drainage area	=	0.049 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.00 min
Total precip.	=	7.51 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

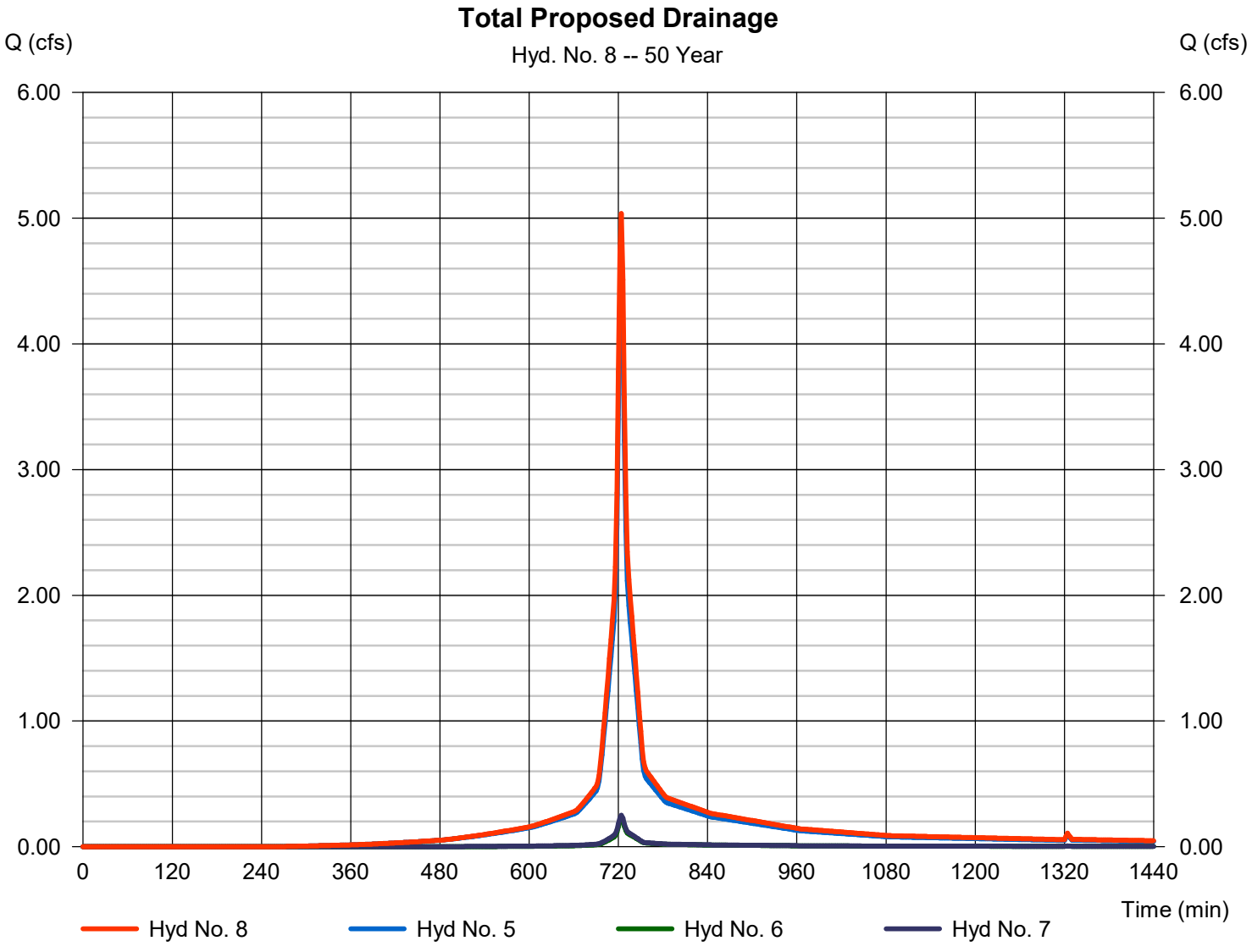


Hydrograph Report

Hyd. No. 8

Total Proposed Drainage

Hydrograph type	= Combine	Peak discharge	= 5.037 cfs
Storm frequency	= 50 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 15,571 cuft
Inflow hyds.	= 5, 6, 7	Contrib. drain. area	= 0.823 ac



Hydraflow Rainfall Report

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	18.0672	3.8000	0.7285	--------
2	22.0221	3.9000	0.7320	--------
3	0.0000	0.0000	0.0000	--------
5	27.7805	3.8000	0.7295	--------
10	32.0891	3.7000	0.7233	--------
25	39.6397	3.8000	0.7285	--------
50	43.8573	3.7000	0.7237	--------
100	50.1556	3.8000	0.7284	--------

File name: Portsmouth NH.IDF

Intensity = B / (Tc + D)^E

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	3.71	2.67	2.13	1.79	1.56	1.39	1.26	1.15	1.06	0.99	0.93	0.88
2	4.45	3.21	2.56	2.16	1.88	1.67	1.51	1.38	1.28	1.19	1.11	1.05
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	5.68	4.09	3.27	2.75	2.39	2.13	1.93	1.76	1.63	1.52	1.42	1.34
10	6.71	4.83	3.86	3.25	2.83	2.52	2.28	2.09	1.93	1.80	1.69	1.59
25	8.13	5.86	4.68	3.94	3.43	3.05	2.76	2.53	2.33	2.17	2.04	1.92
50	9.17	6.60	5.27	4.44	3.86	3.44	3.11	2.85	2.64	2.46	2.30	2.17
100	10.29	7.41	5.92	4.98	4.34	3.86	3.49	3.20	2.95	2.75	2.58	2.43

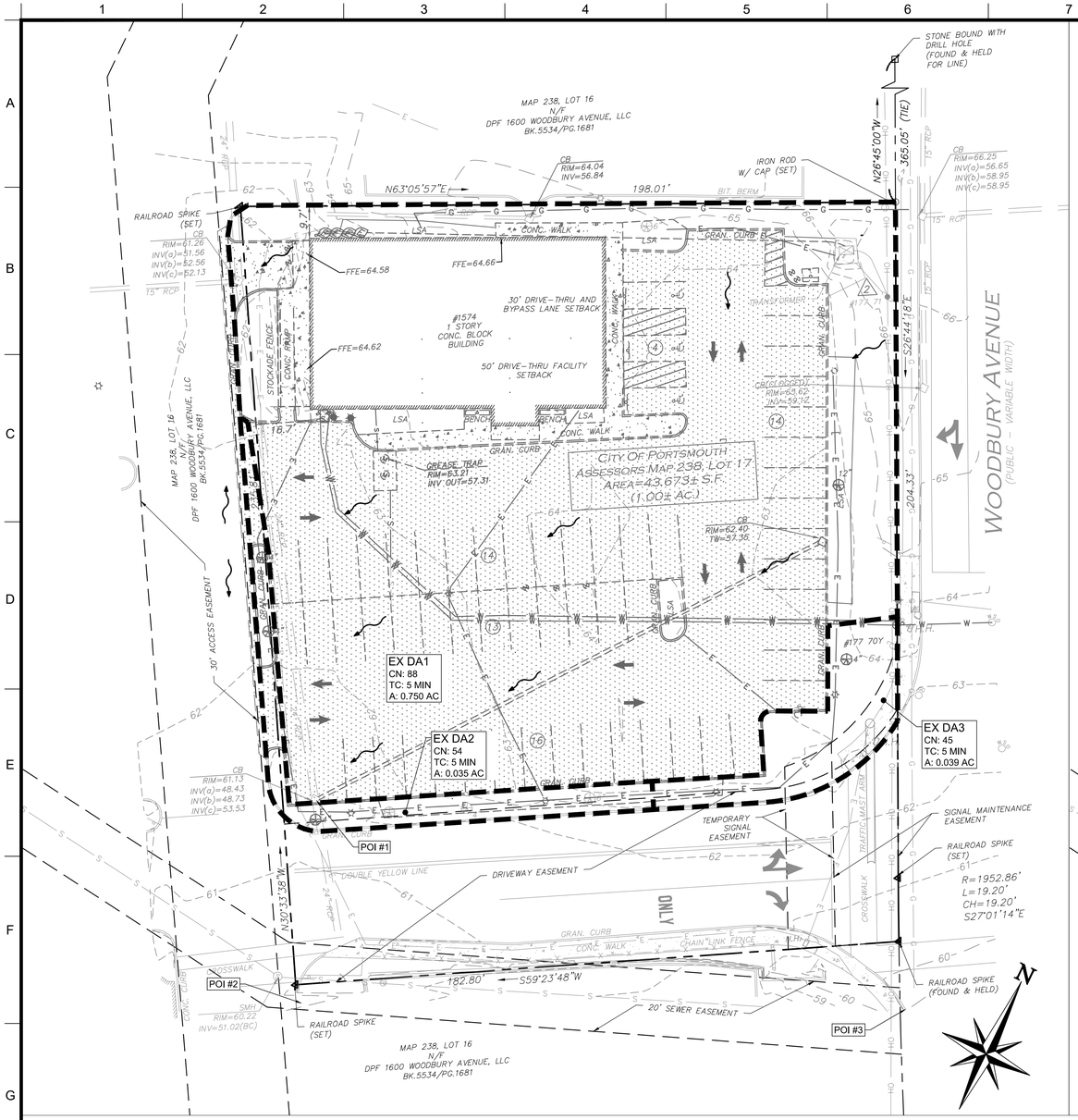
Tc = time in minutes. Values may exceed 60.

n, NH (1574 Woodbury Avenue) OVP# 38100P322370 - JPM.27086\CIVIL\Engineering\Stormwater\Portsmouth NH.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	0.00	3.32	0.00	0.00	5.33	6.59	7.51	7.28
SCS 6-Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX D

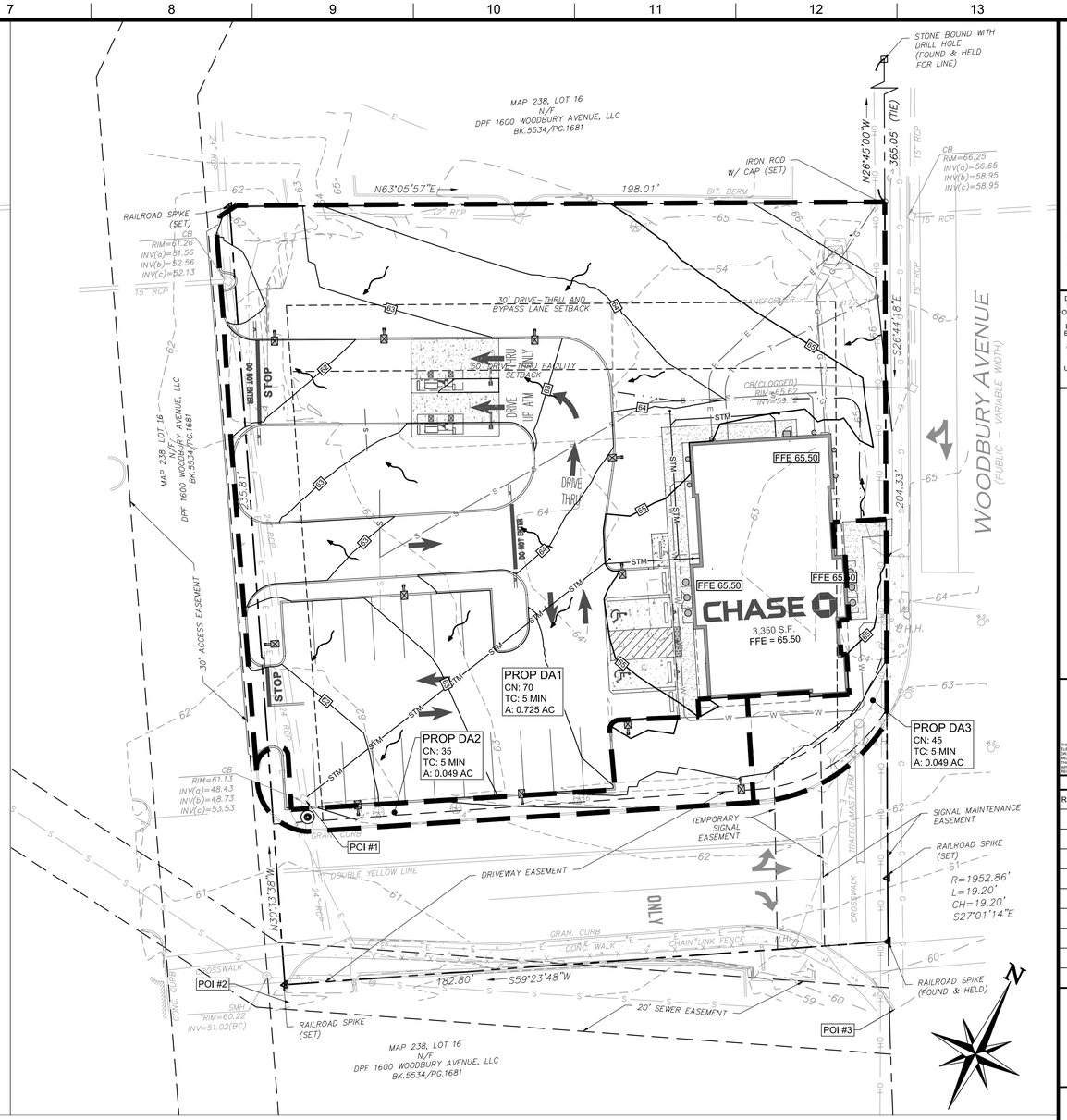
DRAINAGE AREA MAPS



PRE-DEVELOPMENT DRAINAGE AREA MAP

SCALE 1" = 20'

GRAPHIC SCALE
20 10 5 0 20
1" = 20'



POST-DEVELOPMENT DRAINAGE AREA MAP

SCALE 1" = 20'

GRAPHIC SCALE
20 10 5 0 20
1" = 20'

EX-DA 1

IMPERVIOUS (CN 98) = 27,367 SQUARE FEET
PERVIOUS (CN 69) = 5,301 SQUARE FEET
TOTAL (CN 93) = 32,668 SQUARE FEET (0.750 AC)

EX-DA 2 (BYPASS)

IMPERVIOUS (CN 98) = 469 SQUARE FEET
PERVIOUS (CN 69) = 1,065 SQUARE FEET
TOTAL (CN 78) = 1,534 SQUARE FEET (0.035 AC)

EX-DA 3 (BYPASS PROW)

IMPERVIOUS (CN 98) = 271 SQUARE FEET
PERVIOUS (CN 69) = 1,404 SQUARE FEET
TOTAL (CN 74) = 1,675 SQUARE FEET (0.039 AC)

PROP-DA 1

IMPERVIOUS (CN 98) = 17,638 SQUARE FEET
PERVIOUS (CN 69) = 14,407 SQUARE FEET
TOTAL (CN 85) = 32,045 SQUARE FEET (0.736 AC)

PROP-DA 2 (BYPASS)

IMPERVIOUS (CN 98) = 0 SQUARE FEET
PERVIOUS (CN 69) = 2,142 SQUARE FEET
TOTAL (CN 69) = 2,142 SQUARE FEET (0.049 AC)

PROP-DA 3 (BYPASS PROW)

IMPERVIOUS (CN 98) = 338 SQUARE FEET
PERVIOUS (CN 69) = 1,352 SQUARE FEET
TOTAL (CN 74) = 1,690 SQUARE FEET (0.039 AC)

ALERT TO CONTRACTOR:

PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OF THE DRY UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM ENGINEER AND THE OWNER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. ENGINEER AND OWNER SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION.

CORE STATES INC.
12700 HILLCREST ROAD
Suite 192
Dallas, TX 75230
(214) 377-5040
www.core-eng.com

CLIENT

CHASE

811 Know what's below. Call before you dig.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON DESIGN DRAWINGS, RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. CORE STATES, INC. DOES NOT GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, OR THAT APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES.

REV	DATE	COMMENT	BY
1	4/6/2020	RESUBMISSION TO TOWNSHIP	KGF

DOCUMENT

SITE PLAN APPROVAL FOR CHASE BANK

SITE LOCATION

1574 WOODBURY AVENUE, PORTSMOUTH, NH 03801

ENGINEER SEAL

THOMAS C. PICKERING, P.E.
PEN. 0010218

CORE STATES, INC. NH STATE CERTIFICATE OF AUTHORIZATION #01208

SHEET TITLE

DRAINAGE AREA MAPS

JOB #:	JPM.27086
DATE:	04/03/2020
SCALE:	AS NOTED
DRAWN BY:	DJR
CHECKED BY:	AR

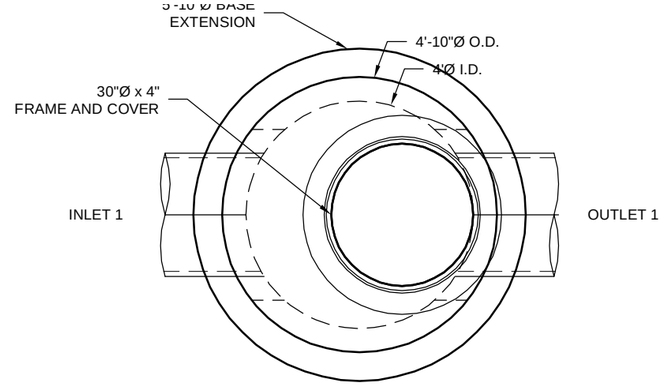
SHEET NO.

C-5

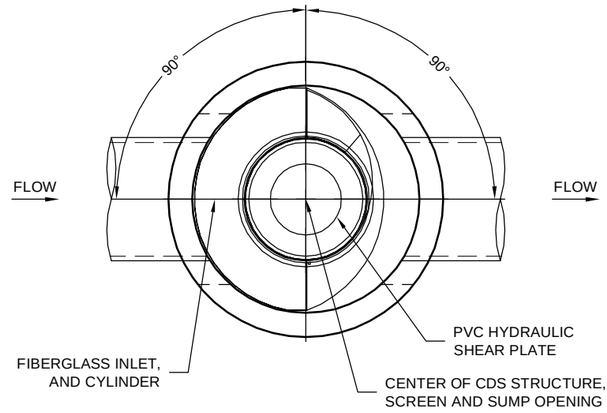
User: KFURAO Plot Date/Time: Apr. 08, 20 - 13:17:38 Drawing: C:\Users\kfurao\appdata\local\temp\AcPublish_17944\JPM.27086 - P-SITE.dwg /C-5 DRAN

APPENDIX E

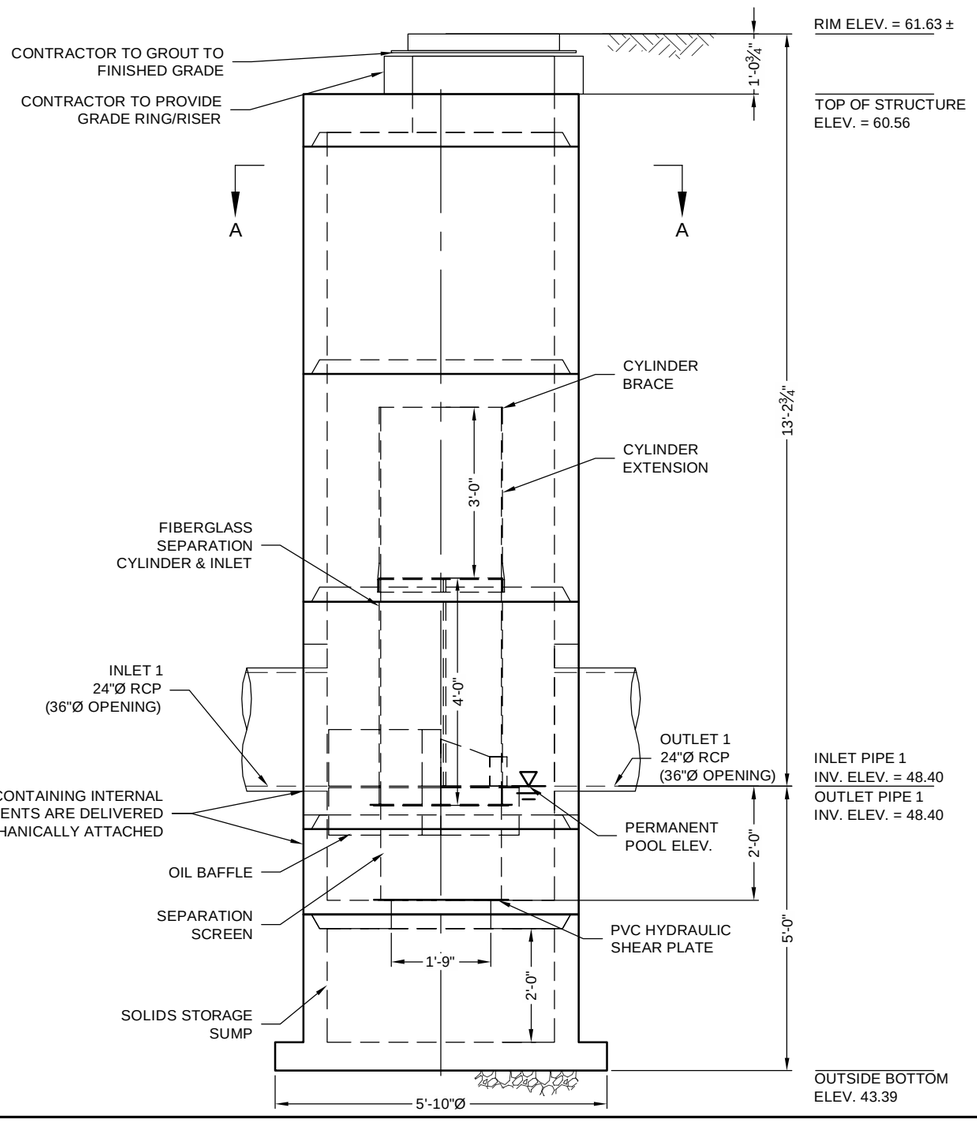
CDS UNIT SPECIFICATIONS



PLAN VIEW



SECTION A-A



MATERIAL LIST (PROVIDED BY CONTECH)

COUNT	DESCRIPTION	INSTALLED BY
1	FIBERGLASS INLET AND CYLINDER	CONTECH
1	2400 micron, 2' O.D. x 1.67' SEP. SCREEN	CONTECH
1	CYLINDER EXTENSION	CONTRACTOR
1	CYLINDER BRACE	CONTRACTOR
1	3/16 INCH PVC HYDRAULIC SHEAR PLATE *	CONTECH
1	SEALANT FOR JOINTS	CONTRACTOR
1	30"Ø x 4" FRAME & COVER, EJ#41600484, OR EQUIV.	CONTRACTOR

* SEE HYDRAULIC SHEAR PLATE DETAIL

SITE DESIGN DATA

WATER QUALITY FLOW RATE	0.7 CFS
ESTIMATED PEAK BYPASS FLOW RATE	35 CFS

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. 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.
4. STRUCTURE SHALL MEET AASHTO HS-20 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 M306 AND BE CAST WITH THE CONTECH LOGO.
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. 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.
E. 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.

STRUCTURE WEIGHT
APPROXIMATE HEAVIEST PICK = 5500 LBS.
STRUCTURE IS DELIVERED IN 5 PIECES

MAX FOOTPRINT = Ø5'-10"

CONTECH
CONTRACT
DRAWING

ARRO
LAYOUT 1E
2015-4-FGIS
5756 / 5756

MARK	DATE	REVISION DESCRIPTION	BY

CDS2015-4-C - 645106-10
CHASE BANK - PORTSMOUTH
PORTSMOUTH, NH
for SYSTEM: CDS

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45

CDS®

THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,766,456; 6,641,720; 6,511,595; 6,649,047; 6,511,593; 6,585,885; 6,746,594; 6,991,724; 7,186,333; 7,296,692; 7,297,266; 7,390,410; 7,425,262; 7,470,366; 7,563,363; 7,582,211; 7,625,485; 7,686,951; 7,905,367; 8,287,728; 8,741,141; 8,802,032; 8,956,531; 9,199,795; 9,352,889; 9,382,702; 9,382,703; 9,388,570; 9,428,898; 9,475,623; 9,475,624; 9,481,499; 9,487,344; 9,499,337; 9,505,538; 9,512,615; 9,546,490; 9,556,599; 9,562,357; 9,580,894; 9,580,895; 9,598,844; 9,604,778; 9,605,412; 9,611,625; 9,617,715; 9,617,716; 9,624,664; 9,631,350; 9,637,910; 9,637,911; 9,644,350; 9,650,772; 9,650,773; 9,650,774; 9,663,928; 9,663,929; 9,670,659; 9,677,260; 9,677,261; 9,683,355; 9,689,153; 9,695,584; 9,695,585; 9,702,126; 9,702,127; 9,708,792; 9,708,793; 9,708,794; 9,708,795; 9,714,503; 9,719,243; 9,719,244; 9,719,245; 9,725,888; 9,725,889; 9,732,500; 9,732,501; 9,732,502; 9,739,045; 9,739,046; 9,739,047; 9,745,727; 9,745,728; 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CONTECH®
ENGINEERED SOLUTIONS

CDS® Inspection and Maintenance Guide

CDS TECHNOLOGIES

Maintenance

The CDS system should be inspected at regular intervals and maintained when necessary to ensure optimum performance. The rate at which the system collects pollutants will depend more heavily on site activities than the size of the unit. For example, unstable soils or heavy winter sanding will cause the grit chamber to fill more quickly but regular sweeping of paved surfaces will slow accumulation.

Inspection

Inspection is the key to effective maintenance and is easily performed. Pollutant transport and deposition may vary from year to year and regular inspections will help ensure that the system is cleaned out at the appropriate time. At a minimum, inspections should be performed twice per year (e.g. spring and fall) however more frequent inspections may be necessary in climates where winter sanding operations may lead to rapid accumulations, or in equipment washdown areas. Installations should also be inspected more frequently where excessive amounts of trash are expected.

The visual inspection should ascertain that the system components are in working order and that there are no blockages or obstructions in the inlet and separation screen. The inspection should also quantify the accumulation of hydrocarbons, trash, and sediment in the system. Measuring pollutant accumulation can be done with a calibrated dipstick, tape measure or other measuring instrument. If absorbent material is used for enhanced removal of hydrocarbons, the level of discoloration of the sorbent material should also be identified during inspection. It is useful and often required as part of an operating permit to keep a record of each inspection. A simple form for doing so is provided.

Access to the CDS unit is typically achieved through two manhole access covers. One opening allows for inspection and cleanout of the separation chamber (cylinder and screen) and isolated sump. The other allows for inspection and cleanout of sediment captured and retained outside the screen. For deep units, a single manhole access point would allows both sump cleanout and access outside the screen.

The CDS system should be cleaned when the level of sediment has reached 75% of capacity in the isolated sump or when an appreciable level of hydrocarbons and trash has accumulated. If absorbent material is used, it should be replaced when significant discoloration has occurred. Performance will not be impacted until 100% of the sump capacity is exceeded however it is recommended that the system be cleaned prior to that for easier removal of sediment. The level of sediment is easily determined by measuring from finished grade down to the top of the sediment pile. To avoid underestimating the level of sediment in the chamber, the measuring device must be lowered to the top of the sediment pile carefully. Particles at the top of the pile typically offer less resistance to the end of the rod than consolidated particles toward the bottom of the pile. Once this measurement is recorded, it should be compared to the as-built drawing for the unit to determine weather the height of the sediment pile off the bottom of the sump floor exceeds 75% of the total height of isolated sump.

Cleaning

Cleaning of a CDS systems should be done during dry weather conditions when no flow is entering the system. The use of a vacuum truck is generally the most effective and convenient method of removing pollutants from the system. Simply remove the manhole covers and insert the vacuum hose into the sump. The system should be completely drained down and the sump fully evacuated of sediment. The area outside the screen should also be cleaned out if pollutant build-up exists in this area.

In installations where the risk of petroleum spills is small, liquid contaminants may not accumulate as quickly as sediment. However, the system should be cleaned out immediately in the event of an oil or gasoline spill should be cleaned out immediately. Motor oil and other hydrocarbons that accumulate on a more routine basis should be removed when an appreciable layer has been captured. To remove these pollutants, it may be preferable to use absorbent pads since they are usually less expensive to dispose than the oil/water emulsion that may be created by vacuuming the oily layer. Trash and debris can be netted out to separate it from the other pollutants. The screen should be power washed to ensure it is free of trash and debris.

Manhole covers should be securely seated following cleaning activities to prevent leakage of runoff into the system from above and also to ensure that proper safety precautions have been followed. Confined space entry procedures need to be followed if physical access is required. Disposal of all material removed from the CDS system should be done in accordance with local regulations. In many jurisdictions, disposal of the sediments may be handled in the same manner as the disposal of sediments removed from catch basins or deep sump manholes.

CDS Model	Diameter		Distance from Water Surface to Top of Sediment Pile		Sediment Storage Capacity	
	ft	m	ft	m	y^3	m^3
CDS1515	3	0.9	3.0	0.9	0.5	0.4
CDS2015	4	1.2	3.0	0.9	0.9	0.7
CDS2015	5	1.3	3.0	0.9	1.3	1.0
CDS2020	5	1.3	3.5	1.1	1.3	1.0
CDS2025	5	1.3	4.0	1.2	1.3	1.0
CDS3020	6	1.8	4.0	1.2	2.1	1.6
CDS3025	6	1.8	4.0	1.2	2.1	1.6
CDS3030	6	1.8	4.6	1.4	2.1	1.6
CDS3035	6	1.8	5.0	1.5	2.1	1.6
CDS4030	8	2.4	4.6	1.4	5.6	4.3
CDS4040	8	2.4	5.7	1.7	5.6	4.3
CDS4045	8	2.4	6.2	1.9	5.6	4.3
CDS5640	10	3.0	6.3	1.9	8.7	6.7
CDS5653	10	3.0	7.7	2.3	8.7	6.7
CDS5668	10	3.0	9.3	2.8	8.7	6.7
CDS5678	10	3.0	10.3	3.1	8.7	6.7

Table 1: CDS Maintenance Indicators and Sediment Storage Capacities

Support

- Drawings and specifications are available at www.contechstormwater.com.
- Site-specific design support is available from our engineers.

Contech Engineered Solutions LLC provides site solutions for the civil engineering industry. Contech's portfolio includes bridges, drainage, sanitary sewer, stormwater, earth stabilization and wastewater treament products. For information, visit www.ContechES.com or call 800.338.1122

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CDS Inspection & Maintenance Log

CDS Model: _____ Location: _____

Date	Water depth to sediment[1]	Floatable Layer Thickness[2]	Describe Maintenance Performed	Maintenance Personnel	Comments

1. The water depth to sediment is determined by taking two measurements with a stadia rod: one measurement from the manhole opening to the top of the sediment pile and the other from the manhole opening to the water surface. If the difference between these measurements is less than the values listed in table 1 the system should be cleaned out. **Note: to avoid underestimating the volume of sediment in the chamber, the measuring device must be carefully lowered to the top of the sediment pile.**

2. For optimum performance, the system should be cleaned out when the floating hydrocarbon layer accumulates to an appreciable thickness. In the event of an oil spill, the system should be cleaned immediately.

Traffic Generation Memo

Project Location

The project site is the location of the former Ruby Tuesday restaurant at 1574 Woodbury Avenue within the Durgin Square Plaza in Portsmouth, NH.

Project Description

The redevelopment proposes to raze the existing "Ruby Tuesday" restaurant and rebuild a Free-Standing Chase Bank branch office at the site. The Ruby Tuesday restaurant consists of 4,570 SF in area and 61 parking spaces are associated with this use. The proposed Chase Bank consists of 3270 SF in area with related remote ATM location(s) in drive-through configuration. The Chase project provides 22 parking spaces for walk-in customers and exceeds local parking requirements for this use.

Access to the parcel will be maintained through driveway openings at the rear of the parcel as part of internal drive aisles within the Durgin Square Plaza. Internal drive aisles from this plaza lead to driveways intersecting with Woodbury Avenue and Durgin Lane at signalized intersections.

Trip Generation

Estimates of the number of vehicle trips associated with the existing and proposed uses were prepared using the Institute of Traffic Engineers' (ITE) publication , *"Trip Generation Manual"*, 10th Edition. This manual provides traffic generation information for various land uses based on traffic studies conducted by traffic engineering professionals nationwide, and is the standard reference for project trip generation studies.

For the pre-construction condition, Land Use Code 932 (High-Turnover Sit-Down Restaurant) was selected to establish the baseline for existing trips attributed to the use. These restaurants are described as moderately priced menus possibly part of a chain with seating by staff. Patrons are typically served by waitstaff and options may include a bar; or bar service.

For comparison with the post-construction condition, Land Use Code 912 (Drive-In Bank) is best-suited for the proposed use; described as providing service for both walk-in and drive-through customers. Based on the floor area of both these uses, the vehicle trips generated are compared in the Table below.

TRIP GENERATION COMPARISON

Trip Description	**Existing Ruby Tuesday** (1)	**Proposed Chase Bank** (2)	**Net Difference**
Weekday (Total Daily) *(50% enter, 50% exit)*	**510**	**388**	**-122**
Weekday am Peak Hour *(approx.)*	**70** *(57% enter, 43% exit)*	**50** *(53% enter, 47% exit)*	**-20**
Weekday pm Peak Hour *(approx.)*	**80** *(52% enter, 48% exit)*	**65** *(50% enter, 50% exit)*	**-15**
Saturday (Total) *(50% enter, 50% exit)*	**580**	**250**	**-270**

1 - ITE Land Use Code 932 (High Turnover Sit-Down Restaurant)
2 - ITE Land Use Code 912 (Drive-In Bank)

Conclusion

As depicted in the comparison table above, there is a net reduction in total trips per day; and reductions during both am and pm peak hours. The redevelopment will result in a positive impact on traffic generation at this site.