Town of Kittery Planning Board Meeting February 27, 2020

ITEM 2 – 76 Dennett Road – Sidewalk/Street/Landscape Design Discussion

Action: Approve or deny street, sidewalk and landscape designs. Owners William J. Cullen and Sail Away, LLC and applicant William Wharff were granted preliminary plan approval on September 26, 2019. That approval was granted with conditions, one of which was to present sidewalk designs per the requirements of Title 16. Applicant will also present street design and landscape design. Agent is Shawn Tobey, P.E. Hoyle, Tanner & Associates, Inc

PROJECT TRACKING

REQ'D	ACTION	COMMENTS	STATUS
YES	Sketch Plan Acceptance/Approval	5/9/2019 meeting	APPROVED
YES	Site Visit	7/23/2019	HELD
YES	Preliminary Plan Review Completeness/Acceptance	7/11/2019 meeting	ACCEPTED
YES	Public Hearing	8/8/2019 meeting	HELD
YES	Preliminary Plan Approval	9/29/19 meeting	APPROVED
YES	Final Plan Review and Decision	Not yet submitted	

Applicant: Prior to the signing of the approved Plan any Conditions of Approval related to the Findings of Fact along with waivers and variances (by the BOA) must be placed on the Final Plan and, when applicable, recorded at the York County Registry of Deeds. PLACE THE MAP AND LOT NUMBER IN 1/4" HIGH LETTERS AT LOWER RIGHT BORDER OF ALL PLAN SHEETS. As per Section 16.4.4.L - Grading/Construction Final Plan Required. - Grading or construction of roads, grading of land or lots, or construction of buildings is prohibited until the original copy of the approved final plan endorsed has been duly recorded in the York County registry of deeds when applicable.

Background

At the Planning Board meeting on December 12th, 2019, the Applicant presented sidewalk plans that showed a sidewalk at the toe of the slope, which would necessitate clearing of existing trees and pose some wetland impacts and a sidewalk located mid-slope which would entail considerable fill and grading plus some clearing of vegetation. The third option which wasn't shown on a plan but was discussed was building the sidewalk within the ROW of Dennett Road. Applicant agreed to provide more information.

<u>Update:</u> At the Planning Board meeting on January 9, 2020, the Applicant requested a waiver of the sidewalk requirements citing pedestrian safety concerns related to the posted speed, lack of crossings and missing connectivity. The Planning Board requested that the Applicant provide a plan showing a sidewalk within the ROW along the entire frontage of the property in order to make an informed decision on the waiver.

NOTE: The February 13th Planning Board meeting was cancelled. In the interim, the Applicant's engineer has received more direction from MaineDOT on the road design. The plans have subsequently been modified and replace the plans that were in the packet for the February 13th meeting.

Staff Review

The materials submitted for this meeting's discussion are comprised of:

- 1. A letter describing the submission;
- 2. A 28-page plan set, with Sheets C13 and C14 showing road design and section details

Sidewalk Design

The sidewalk design proposed consists of two segments:

- 1. From the proposed development's entrance north, for most of the way, a 6-foot wide sidewalk with a 4 ½ foot grass strip between the vertical granite curbing and the 8-foot shoulder on the other is proposed. Along the final section to the property line, the sidewalk runs adjacent to the shoulder with a guard rail on the other side.
- 2. From the proposed development's entrance south, a six-foot wide sidewalk is proposed with a 4 ½ foot grass strip between vertical granite curbing plus the 7-foot shoulder.

The plan shows the vegetation removal and grading involved with the sidewalk installation.

Street Design

The Applicant received comments back from the MaineDOT Traffic Movement Permit (TMP) Application.

- 1. MaineDOT is requiring a dedicated left-turn lane for vehicles wishing to enter the I-95 southbound ramp from Dennett Road and it appears on the plan. A five-foot wide shoulder is also required on the south-bound side of the road the plans show an 8-foot wide shoulder coming from the north, tapering to a 7-foot shoulder at the southern end.
- 2. The right-turn access lane into the development is not being required by MaineDOT because the speed limit on Dennett Road is not great enough (it must be 45 mph to require such a lane and Dennett Road is 40 mph). The Applicant does not propose a right turn lane instead taking advantage of the freed space by proposing consistent 6-foot wide sidewalks, a wider shoulder (useful for bicycle travel) and for ¾ of the frontage, a 4 ½ foot grass strip between the sidewalk and the curb.

Because of the unusual circumstances with the cancelled meeting and the Applicant wishing to move ahead to address MaineDOT's review and the Town's requests, there wasn't time for CMA, the Fire Chief, Police Chief and DPW to look at the plans. Staff will ensure that appropriate review is done and process is followed.

Landscape Design

Jeffrey Hyland, of Ironwood Design, at the request of CMA, has reviewed the landscape plans. The Applicant has responded to the comments to Jeff's satisfaction (letter included in packet for February 13th meeting) with revised landscaping plans (see Sheet C19 and C20).

Recommendation / Action

The Board will want to discuss the plans and materials submitted.

If the Board indicates (sense of the Board) that the sidewalk design is sufficient and satisfactory, the Applicant will request to withdraw the sidewalk waiver request. The suggested motion to accept the withdrawal is below:

Move to accept the withdrawal of the sidewalk waiver request, dated December 19, 2020 as prepared by Hoyle, Tanner & Associates, Inc., for owners William J. Cullen and Sail Away, LLC and applicant William Wharff for a mixed-use residential development on 23.3+- acres of land at 76 Dennett Road (Tax Map 6 Lots 15B & 16A and Tax Map 13, Lot 4) in the Mixed Use - Neighborhood (MU-N) Zone.

Page 3 of 3

If the Board finds that sufficient information regarding the sidewalk and street design has been submitted, a vote can be taken. If the Board votes to approve the street and sidewalk design, Staff recommends a condition be added to address any comments/concerns that CMA, DPW and public safety officials may have.

The suggested motion is below:

Move to approve/deny the sidewalk/street design plan, dated February 20, 2020 as prepared by Hoyle, Tanner & Associates, Inc., for owners William J. Cullen and Sail Away, LLC and applicant William Wharff for a mixed-use residential development on 23.3+- acres of land at 76 Dennett Road (Tax Map 6 Lots 15B & 16A and Tax Map 13, Lot 4) in the Mixed Use - Neighborhood (MU-N) Zone [with the condition that any comments or concerns from CMA, DPW or public safety officials be addressed before final plan submission].

If the Board finds that sufficient information regarding the landscape design has been submitted, a vote can be taken:

Move to approve/deny the landscape design plans, dated February 20, 2020 as prepared by Hoyle, Tanner & Associates, Inc., for owners William J. Cullen and Sail Away, LLC and applicant William Wharff for a mixed-use residential development on 23.3+- acres of land at 76 Dennett Road (Tax Map 6 Lots 15B & 16A and Tax Map 13, Lot 4) in the Mixed Use - Neighborhood (MU-N) Zone.

February 20, 2020

Adam Causey Director of Planning and Development Town of Kittery 200 Rogers Road Kittery, ME 03904

Re: Project Update

Proposed Mixed-Use Development at 76 Dennett Road

Lots 6-15B, 6-16A, 13-4, Kittery, Maine

Dear Mr. Causey,

On behalf of Aztec, LLC, Hoyle, Tanner and Associates is pleased to submit a completed set of updated project drawings. Since the last Planning Board meeting on January 9, 2020 we have made the following changes to the project:

oyle, Tanner Associates, Inc.

Pease International Tradeport

603-431-2520

www.hovletanner.com

100 International Drive, Suite 360

Portsmouth, New Hampshire 03801

- The right turn lane into the proposed mixed-use development was removed as it is not required per comments made by the MaineDOT. The MaineDOT policy for auxiliary lanes is to use the existing speed limit. Since the right turn lane is not warranted with the existing speed limit, DOT will not require the installation of this auxiliary lane. The removal of the right turn lane will significantly reduce the amount of new impervious cover and limit the required grading and tree clearing. It will also create a safer, more direct bicycle lane that will not need to jog around turning vehicles. This new configuration allows for the proposed sidewalk to be constructed a consistent five feet off the face of curbing along Dennett Road which provides an aligned crosswalk at the main entrance. Due to the shift of the proposed sidewalk, the grading behind the sidewalk can now be a consistent 3:1 slope; therefore, a proposed pedestrian rail is no longer needed. At the culvert crossing, the sidewalk will shift to the edge of the roadway and the embankment will be constructed at a 2:1 slope due to the steep existing side slopes. The existing guardrail in this location will be removed and a new guardrail will be constructed at the back of the new sidewalk.
- The roadway design was revised to address all comments from Randy Illian's email dated February 10, 2020. The crown of the roadway was shifted to the edge of the center left turn lane, the gravel shoulders were revised to daylight into the ditch, sidewalk backslopes were revised to 3:1 maximum to eliminate guardrail or pedestrian rails, and the roadway cross slope was reduced to 2.4%.
- All third-party landscape review comments from Ironwood were thoroughly addressed.
- The proposed onsite booster pump and building were removed from the design plans. Based on the Hydraulic System Analysis prepared by Wright-Pierce dated November 25, 2019 and coordination with the Kittery Water District, each building shall have individual booster pumps located within the building for both domestic and fire services to provide adequate water pressure to all floors. The proposed onsite water line will be stubbed at the rear property line with the intent of a future loop connection to the existing water located within the Route 236 right of way. If this connection were to occur and the Kittery Water district assumed ownership of the water line, it would not be practical to have a privately owned booster pump connected to the line.
- The address of the applicated, Aztec LLC, has changed to One City Center, P.O. Box 9546, Portland, ME 04112.

We trust the revised drawings have thoroughly addressed all design comments and concerns to date. We look forward to presenting the updated changes made at the next Planning Board Meeting. Please do not hesitate to contact our office with any additional questions or comments regarding this project.

Sincerely,

HOYLE, TANNER & ASSOCIATES, INC.
Shown Jobey

Shawn M. Tobey, P.E. Project Manager



SITE DEVELOPMENT PLANS

FOR A

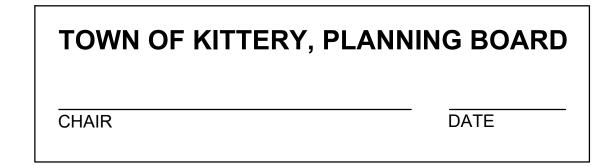
PROPOSED MIXED-USE RESIDENTIAL DEVELOPMENT PROJECT

76 DENNETT ROAD KITTERY, ME 03904

APPLICANT

AZTEC, LLC ONE CITY CENTER, P.O. BOX 9546 PORTLAND, ME 04112

LAST REVISED: FEBRUARY 20, 2020



PERMITS/APPROVALS

	PERMIT NUMBER	DATE APPROVED
MAINE DEP SITE LOCATION OF DEVELOPMENT	#L-28385-26-A-N, KITTERY	PENDING
MAINEDOT TRAFFIC MOVEMENT PERMIT	REG. 1-XXXXX-A-N	PENDING
TOWN OF KITTERY SITE PLAN APPROVAL	TAX MAP LOTS 6-15B, 6-16A & 13-4	PENDING

ICT OF DDAMINOC

LIST (OF DRAV	WINGS
DWG#	SHEET#	DWG NAME
C1	1	TITLE SHEET
C2	2	NOTES, ABBREVIATIONS & LEGEND
C3	3	OVERALL EX. CONDITIONS PLAN/BOUNDARY SURVEY
C4	4	HIGH INTENSITY SOIL MAP
C5	5	OVERALL SITE PLAN
C6	6	FRONT EROSION CONTROL & HOUSEKEEPING PLAN
C7	7	REAR EROSION CONTROL & HOUSEKEEPING PLAN
C8	8	FRONT SITE PLAN
C9	9	REAR SITE PLAN
C10	10	FRONT GRADING & DRAINAGE PLAN
C11	11	REAR GRADING & DRAINAGE PLAN
C12	12	SITE ROADWAY PLAN & PROFILE
C13	13	DENNETT ROAD LAYOUT PLAN
C14	14	DENNETT ROAD GRADING & DRAINAGE PLAN
C15	15	FRONT UTILITY PLAN
C16	16	REAR UTILITY PLAN
C17	17	FRONT LIGHTING PLAN
C18	18	REAR LIGHTING PLAN
C19	19	FRONT LANDSCAPING PLAN
C20	20	REAR LANDSCAPING PLAN
C21	21	CONSTRUCTION DETAILS 1
C22	22	CONSTRUCTION DETAILS 2
C23	23	CONSTRUCTION DETAILS 3
C24	24	CONSTRUCTION DETAILS 4
C25	25	CONSTRUCTION DETAILS 5
C26	26	CONSTRUCTION DETAILS 6
C27	27	CONSTRUCTION DETAILS 7
C28	28	CONSTRUCTION DETAILS 8

SITE 23.34± AC. SPINNEY CREEK NEW HAMPSHIP,

LOCUS MAP

1" = 1000'

ISSUED FOR PLANNING BOARD APPROVAL NOT FOR CONSTRUCTION

UTILITY CONTACTS:

WATER SERVICE:

KITTERY WATER DISTRICT 17 STATE ROAD

KITTERY, ME 03904 CONTACT: MICHAEL ROGERS (207) 439-1128

FIRE DEPARTMENT:

KITTERY FIRE DEPARTMENT KITTERY SEWER DEPARTMENT 3 GORGES ROAD 18 DENNETT ROAD ROAD KITTERY. ME 03904 KITTERY, ME 03904 CONTACT: DAVID O'BRIEN CONTACT: TIM BABKIRK (207) 439-2262

SEWER SERVICE:

(207) 439-4646

STORMWATER / ROW:

KITTERY PUBLIC WORKS 200 ROGERS ROAD KITTERY, ME 03904 CONTACT: JESSA KELLOGG (207) 475-1321

ELECTRIC SERVICE:

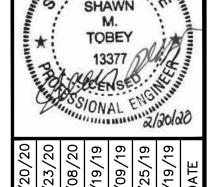
CENTRAL MAINE POWER COMPANY 83 EDISON DRIVE AUGUSTA, ME 04330 CONTACT: VAN HOBGOOD (800) 750-4000

TELECOMMUNICATIONS:

FAIRPOINT COMMUNICATIONS 1575 GREENLAND ROAD GREENLAND, NH 03840 **CONTACT: JOE CONSIDINE** (603) 427-5525

GAS SERVICE:

UNITIL ME GAS OPERATIONS 376 RIVERSIDE INDUSTRIAL PARKWAY PORTLAND, ME 04103 CONTACT: SCOTT CARPENTER (207) 541-2543



		- 3	,11111	1 12 20 0	· \	Ololo		
02/20/20	01/23/20	01/08/20	12/19/19	12/09/19	11/25/19	09/19/19	DATE	
ISSUED FOR APPROVAL - REVISED PER MAINE DEP & MAINEDOT COMMENTS 02/20/20	ISSUED FOR PB REVIEW - REVISED TURN LANE, SIDEWALKS & LANDSCAPING 01/23/20	REVISED OUTLET PROTECTION DETAIL PER ACOE COMMENTS	ISSUED FOR PLANNING BOARD REVIEW — REVISED SIDEWALKS	ISSUED FOR MAINEDOT TRAFFIC MOVEMENT PERMIT (TMP)	COLOR CODED POND DRAINAGE AREA PLAN	REVISED ENTRANCE & MISCELLANEOUS REVISIONS PER PLANNING BOARD	REVISION DESCRIPTION	
12	11	10	6	8	2	9	REV.	
PREPARED AS	PREPARED AS F SERVICE AND E PROPERTY OF T MAY NOT BE D, DISSEMINATED N ANY MANNER, RONICALLY, FOR OSE THAN THIS T THE WRITTEN OYLE, TANNER. CHECKED BY							
THIS DOCUMENT IS PREPARED AS	AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF	HOYLE, TANNER. IT	R IRANSFERRED IN ANY MAN INCLUDING ELECTRONICALLY, F	ANY OTHER PURPOSE THAN THIS PROJECT, WITHOUT THE WRITTEN	PERMISSION OF HOYLE,	LED BY DRAWN BY	SMT	
-	-0	- ⊃ i	0 -	\dashv	VED BY	⊢		

ates, Inc

(603) © Cop

DENNETT ROAD

TAX MAP LOT 13-4

5.06± ACRES

PROJECT TEAM:

CIVIL ENGINEER

OWNER:

SAIL AWAY, LLC

WILLIAM J. CULLEN

KITTERY. ME 03904

13.29± ACRES

76 DENNETT ROAD SAIL AWAY, LLC

PISCATAQUA REALTY, LLC

TAX MAP LOT 6-15B

PARCEL INFORMATION:

HOYLE. TANNER & ASSOCIATES 100 INTERNATIONAL DRIVE, SUITE 360 PORTSMOUTH, NH 03801 ATTN: SHAWN TOBEY (603) 431-2520

ARCHITECT

CUBE3 370 MERRIMACK STREET, SUITE 337 LAWRENCE, MA 01843 ATTN: NICK GRIFFIN (978) 989-9900

GEOTECHNICAL ENGINEER

S.W. COLE ENGINEERING, INC. 10 CENTRE ROAD SOMERSWORTH, NH 03878 ATTN: ANTHONY HERSH (603) 692-0088

SURVEYOR

FIELDSTONE LAND CONSULTANTS, PLLC 206 ELM STREET MILFORD, NH 03055 ATTN: MICHAEL PLOOF (603) 672-5456

LIGHTING DESIGN

VISUAL LIGHT, INC. 24 STICKNEY TERRACE, SUITE 6 HAMPTON, NH 03842 ATTN: SCOTT DROUIN (603) 926-6049

TRAFFIC

TAX MAP LOT 6-16A

70 DENNETT ROAD

4.99± ACRES

HOYLE, TANNER & ASSOCIATES 100 INTERNATIONAL DRIVE, SUITE 360 PORTSMOUTH, NH 03801 ATTN: TODD CLARK (603) 431-2520

TRAFFIC COUNTS

PRECISION DATA INDUSTRIES, LLC **46 MORTON STREET** FRAMINGHAM, MA 01702 ATTN: SCOTT PETTY (508) 875-0100

WATER HYDRAULIC MODEL

WRIGHT-PIERCE 11 BOWDOIN MILL ISLAND, SUITE 140 TOPSHAM. ME 04068 **CONTACT: JACQUELINE COBB** (207) 725-8721

WETLAND PERMITTING

ATLANTIC ENVIRONMENTAL, LLC 135 RIVER ROAD WOOLWICH, ME 04579 CONTACT: LISA VICKERS (207) 837-2199

WETLANDS/SOIL MAPPING

JOSEPH NOEL P.O. BOX 174 SOUTH BERWICK, ME 03908 CONTACT: JOSEPH NOEL (207) 384-5587

CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION DIGSAFE.COM **DIAL 811**



TITLE SHEET PROJECT NO. 569200 SHEET 1 OF 28

GENERAL NOTES:

- 1. THE BOUNDARY, SURFACE FEATURES AND TOPOGRAPHY ARE THE RESULT OF AN ON THE GROUND SURVEY CONDUCTED DURING THE MONTH OF APRIL 2019 BY FIELDSTONE LAND CONSULTANTS, PLLC. SEE DWG C3 FOR ADDITIONAL EXISTING CONDITIONS INFORMATION REGARDING THE WETLANDS, VERNAL POOL AND STREAM.
- 2. THIS PROJECT IS TO BE CONSTRUCTED TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET THE STANDARDS OF THE TOWN OF KITTERY, MAINE DEP AND MAINE DOT.
- 3. THIS PROJECT SHALL CONFORM TO ALL REQUIREMENTS SET FORTH IN THE MAINE DEP SITE LOCATION OF DEVELOPMENT LAW PERMIT.
- 4. ALL WORK WITHIN THE STATE RIGHT—OF—WAY SHALL CONFORM TO ALL REQUIREMENTS SET FORTH IN THE MAINE DOT TRAFFIC MOVEMENT PERMIT FOR THE PROJECT.
- 5. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN COMPILED IN PART FROM PLANS OF RECORD AND FIELD LOCATION. THE LOCATION OF UNDERGROUND UTILITIES SHOULD BE CONSIDERED APPROXIMATE.
- 6. THE CONTRACTOR SHALL VERIFY AND DETERMINE THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS PRIOR TO THE START OF ANY CONSTRUCTION. THE CONTRACTOR SHALL LOCATE THE UTILITIES SHOWN AND THE POSSIBLE EXISTENCE OF OTHER UNDERGROUND UTILITIES BY PROVIDING OBSERVATION TEST PITS. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (DIAL 811) AND THE TOWN OF KITTERY AT LEAST 72 HOURS BEFORE DIGGING.
- 7. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
- 8. WHEN PREPARING THE EXISTING SITE FOR THE PROPOSED DEVELOPMENT, ALL MATERIALS REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL GOVERNING AGENCIES.
- 9. THE CONTRACTOR SHALL PERFORM ALL THE CLEARING AND GRUBBING NECESSARY WITHIN THE CONSTRUCTION AREA, LIMITING THE AMOUNT OF CLEARING AND GRUBBING TO THE GREATEST EXTENT POSSIBLE.
- 10. CONTRACTOR SHALL MAKE EVERY ATTEMPT POSSIBLE TO SAVE EXISTING TREES AND MINIMIZE DAMAGE TO TREES ADJACENT TO CONSTRUCTION LIMITS DURING CONSTRUCTION.
- 11. DURING CONSTRUCTION THERE SHALL BE NO DISTURBANCES TO THE EXISTING WETLANDS, VERNAL POOL, CRITICAL TERRESTRIAL HABITAT OR THE 25' STREAM BUFFER EXCEPT FOR APPROVED PERMITTING DISTURBANCES OR AREAS OF HABITAT RESTORATION.
- 12. THE CONSTRACTOR SHALL PROTECT AND MAINTAIN EXISTING BENCHMARKS AND BOUNDS. ALL BENCHMARKS AND BOUNDS DISTURBED BY THE CONTRACTOR SHALL BE RE-ESTABLISHED BY A MAINE REGISTERED LAND SURVEYOR AT NO EXPENSE TO THE OWNER.
- 13. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ANY EXCAVATION SAFEGUARDS, NECESSARY BARRICADES, POLICE DETAILS, ETC., FOR TRAFFIC CONTROL AND SITE SAFETY. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS.
- 14. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR THE CONDITIONS OF THE SITE.
- 15. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ALL WORK IS DONE IN ACCORDANCE WITH OSHA REQUIREMENTS.
- 16. ALL DEWATERING MUST BE EXECUTED IN ACCORDANCE WITH MAINE DOT STANDARD SPECIFICATIONS. REGULATIONS PROHIBIT DISCHARGING GROUNDWATER TO A SANITARY OR COMBINED SEWER WITHOUT PERMISSION.
- 17. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS (PIPE, CASTINGS, STRUCTURES, ETC.) TO THE INSPECTING ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND INSTALLATION.
- 18. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, TEMPORARY UTILITIES AND COORDINATION WITH ALL AGENCIES IN OBTAINING ACCESS TO THE SITE AND PERFORMING ALL WORK REQUIRED FOR THIS PROJECT.
- 19. THE BUILDING FOOTPRINTS SHOWN ON THESE PLANS ARE BASED ON PRELIMINARY ARCHITECTURAL DRAWINGS. COORDINATE ALL BUILDING LAYOUTS AND DIMENSIONS WITH THE FINAL ARCHITECTURAL DRAWINGS.
- 20. SQUARE FOOTAGE CALCULATIONS PROVIDED FOR THE PROPOSED DWELLING UNITS ARE BASED ON THE TOTAL HABITABLE FLOOR SPACE PER THE KITTERY LAND USE & DEVELOPMENT CODE (LUDC) AND INCLUDE ALL INTERIOR CONDITIONED ROOMS.
- 21. THE CONTRACTOR SHALL FILE AND OBTAIN A NPDES CONSTRUCTION GENERAL PERMIT PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR THE PREPARATION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PRIOR TO CONSTRUCTION.
- 22. COORDINATE ALL WORK ADJACENT TO THE PROPOSED BUILDINGS WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- 23. ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE LATEST EDITIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AMERICANS WITH DISABILITIES (ADA) ACT, AND STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS.
- 24. ALL CURB SHALL BE VERTICAL GRANITE UNLESS OTHERWISE NOTED.
- 25. THE PROPOSED DRIVEWAY AND ACCESS ROAD TO THE REAR OF THE SITE WILL BE A PRIVATE ROAD AND SHALL BE MAINTAINED BY THE PROPERTY OWNER.
- 26. THERE SHALL BE NO ONSITE SALT STORAGE.
- 27. THE PROPOSED NATURE TRAIL SHALL BE FOR ONSITE RESIDENTS ONLY.
- 28. ALL PROPOSED SITE FEATURES SHALL BE LAID OUT IN THE FIELD USING SURVEY EQUIPMENT. AN AUTOCAD FILE OF THE EXISTING AND PROPOSED FEATURES WITH CONTROL POINTS WILL BE PROVIDED TO THE CONTRACTOR FOR CONSTRUCTION LAYOUT. THE LIMIT OF WORK SHALL BE CLEARLY MARKED IN THE FIELD BEFORE ANY WORK IS TO BEGIN ONSITE.
- 29. SYMBOLS AND LINETYPES MAY BE EXAGGERATED FOR CLARITY ON THESE DRAWINGS DUE TO THE SCALE. THE CONTRACTOR SHALL ADJUST ACCORDINGLY DURING CONSTRUCTION LAYOUT.
- 30. A PROFESSIONAL ENGINEER OR QUALIFIED DESIGN PROFESSIONAL SHALL BE RETAINED TO PERFORM PERIODIC SITE INSPECTION TO ENSURE CONSTRUCTION IS IN COMPLIANCE WITH THE APPROVED DRAWINGS.

DRAINAGE NOTES:

- 1. THE STORM DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. ALL PIPE MATERIALS SHALL BE AS SPECIFIED ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO MAINE DOT STANDARD SPECIFICATIONS. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604.
- 2. ALL CATCH BASIN FRAMES AND GRATES SHALL NEENAH R-3472 OR APPROVED EQUAL.
- 3. PROPOSED RIM ELEVATIONS OF DRAINAGE MANHOLES AND CATCH BASINS ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH WITH FINISH GRADES.
- 4. THE CONTRACTOR SHALL CONFIRM THE EXISTING GRADES AT THE OUTLET ELEVATIONS FOR ALL THREE WET PONDS PRIOR TO ANY DRAINAGE AND POND CONSTRUCTION.
- 5. THE CONTRACTOR SHALL CONFIRM THE ELEVATIONS FOR ALL DRAIN PIPE RUNS PRIOR TO ANY INSTALLATION.
- 6. THE CONTRACTOR SHALL PROVIDE FOR THE HANDLING OF EXISTING FLOWS FROM SERVICE CONNECTIONS AND MAINLINE PIPES. THE EXISTING DRAINS MAY HAVE ACTIVE FLOW AND THE CONTRACTOR SHALL MAINTAIN CONTINUOUS FLOW WITHOUT RESTRICTIONS.
- 7. THE CONTRACTOR SHALL STABILIZE ANY AND ALL DITCHES, SWALES AND PONDS PRIOR TO DIRECTING STORMWATER RUN-OFF TO THEM.
- 8. WHEN CONNECTING NEW PIPES TO EXISTING STRUCTURES SUCH AS MANHOLES AND CATCH BASINS, THE STRUCTURE SHALL BE COMPLETELY CLEANED OUT. THE HOLE MADE IN THE STRUCTURE SHALL BE AS SMALL AS NECESSARY. THE STRUCTURE SHALL BE REPAIRED TO MATCH ITS ORIGINAL TYPE OF CONSTRUCTION. THE JOINT BETWEEN THE STRUCTURE AND THE PIPE SHALL BE MADE WATERTIGHT BY FILLING THE JOINT WITH MORTAR.
- 9. THE CONTRACTOR SHALL CLEAN THE ENTIRE STORMWATER SYSTEM OF ALL SEDIMENT AND DEBRIS, WITHIN THE LIMIT OF WORK UPON COMPLETION OF CONSTRUCTION.
- 10. ALL DRAIN PIPES SHALL HAVE A MINIMUM GROUND COVER OF 3'. IF THE REQUIRED COVER CANNOT BE OBTAINED, THE PROPOSED PIPE SHALL BE ADS N-12 DOUBLE WALLED HDPE OR APPROVED EQUAL. INSTALL 4" OF RIGID INSULATION ABOVE THE DRAIN LINE IF 3' COVER CANNOT BE OBTAINED.
- 11. ALL PROPOSED CATCH BASINS SHALL BE DEEP SUMP CATCH BASINS WITH 4' SUMPS.
- 12. HEAWALLS 1-3, 6 AND 7 SHALL BE MORTAR RUBBLE OR STONE PATTERN STAMPED CONCRETE HEADWALLS. PROVIDE STAMPED PATTERN FOR REVIEW AND APPROVAL FROM OWNER.
- 13. THE PROPOSED STORMWATER SYSTEM AND WET PONDS SHALL BE MAINTAINED ACCORDING TO THE STORMWATER INSPECTION AND MAINTENANCE MANUAL PREPARED UNDER THE MAINE DEP SITE LOCATION OF DEVELOPMENT PERMIT. THE SYSTEM SHALL BE INSPECTED AT A MINIMUM IN THE SPRING AND FALL.
- 14. PROPOSED BUILDINGS 1-4 ARE DESIGNED WITH FLAT ROOFS AND INTERNAL ROOF DRAINS THAT CONNECT TO THE CLOSED DRAINAGE SYSTEM. BUILDINGS 5-9 HAVE SLOPED ROOFS THAT PITCH TO THE REAR OF THE STRUCTURES. ROOF RUNOFF IS COLLECTED THROUGH AN INFILTRATION CRUSHED STONE UNDERDRAIN THAT IS CONNECTED TO THE CLOSED DRAINAGE SYSTEM.
- 15. THE CONTRACTOR SHALL INSTALL PERIMETER FOOTING DRAINS AROUND ALL PROPOSED BUILDINGS. THE FOOTING DRAINS SHALL DRAIN TO DAYLIGHT OUTSIDE THE LIMITS OF PAVEMENT. SEE STRUCTURAL PLANS AND GEOTECHNICAL REPORT FOR PIPE SIZE AND INSTALLATION LOCATIONS.

EARTHWORK & GRADING NOTES:

- 1. GRADE AWAY FROM BUILDING WALLS AT 2% MINIMUM (TYPICAL).
- PROVIDE UNIFORM SLOPE BETWEEN CONTOURS AND/OR SPOT ELEVATIONS.
- 3. SPOT GRADES SHOWN ARE PAVEMENT ELEVATIONS AT THE CURBLINE
- UNLESS OTHERWISE NOTED.
- 4. ALL GRASSED AND LANDSCAPED AREAS INSIDE THE SIDEWALKS SHALL BE GRADED TO DRAIN TO THE PROPOSED CATCH BASINS.
- 5. EARTH SLOPES SHALL BE NO STEEPER THAN 2:1 (HORIZONTAL: VERTICAL) AND SHALL BE FLATTER WHERE SHOWN.
- THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ROOTS AND STUMPS FOR TREES THAT ARE REMOVED.
- 7. GENERAL FILL BEYOND PAVED AREAS SHALL BE FREE OF BRUSH RUBBISH, STUMPS, AND STONES LARGER THAN 8". FILL SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 8" IN THICKNESS. THE DRY DENSITY AFTER COMPACTION SHALL NOT BE LESS THAN 95% OF THE STANDARD PROCTOR TEST AND DONE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM D698.
- AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, THE SUBGRADE SHALL BE LOOSENED BY SCARIFYING TO A DEPTH OF AT LEAST 2" TO ENSURE BONDING OF THE TOPSOIL AND SUBSOIL.
- 9. FILL OR TOPSOIL SHALL NEITHER BE PLACED NOR COMPACTED WHILE IN A FROZEN OR MUDDY CONDITION OR WHILE SUBGRADE IS FROZEN.
- 10. FINISH PAVEMENT SURFACES AND LAWN AREAS SHALL BE FREE OF LOW SPOTS AND PONDING AREAS.
- 11. ALL FINISHED PAVEMENT SURFACES SHALL HAVE A MINIMUM SLOPE OF 0.5% TOWARDS A DRAINAGE STRUCTURE.
- 12. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS THAT DO NOT HAVE A SURFACE TREATMENT SPECIFICALLY SPECIFIED SHALL BE RESTORED TO A MINIMUM OF 4" OF SEEDED TOPSOIL, FERTILIZER, AND MILL CH
- 13. THE CONTRACTOR SHALL COORDINATE ALL BLASTING REQUIRED FOR LEDGE REMOVAL WITH THE REQUIREMENTS SET FORTH IN THE MAINE DEP SITE LOCATION OF DEVELOPMENT PERMIT AND IN ACCORDANCE WITH THE TOWN OF KITTERY BLASTING ORDINANCE.
- 14. THE CONTRACTOR SHALL SUBMIT STAMPED RETAINING WALL DESIGN PLANS FROM THE WALL MANUFACTURER TO THE INSPECTING ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

UTILITY NOTES:

- 1. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE WITH THE UTILITY COMPANIES FOR RELOCATING AND/OR SUPPORTING THEIR UTILITIES IN ACCORDANCE WITH THE SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO EXISTING FACILITIES AT ALL TIMES. IF ANY DISRUPTION MUST OCCUR, CONTRACTOR SHALL NOTIFY AND COORDINATE WITH FACILITY AT LEAST 72 HOURS IN ADVANCE.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF EXISTING UTILITIES AND STRUCTURES DAMAGED OR REMOVED BY THE CONTRACTOR DURING THEIR OPERATIONS.
- 4. THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY AGENCIES/COMPANIES, AND ARRANGE FOR ALL INSPECTIONS.
- 5. FINAL ELEVATIONS OF UTILITY STRUCTURES ARE TO BE SET FLUSH WITH FINISH GRADES. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES, AND OTHER UTILITIES TO FINISHED GRADE WITHIN LIMITS OF WORK.
- 6. DURING EXCAVATION, IT IS ANTICIPATED THAT EXISTING UTILITIES AND SEWERS WILL BE EXPOSED. THE CONTRACTOR SHALL PROVIDE PROTECTION AND SUPPORT OF THESE FACILITIES AND REPAIR ANY DAMAGE CAUSED BY THE WORK IN A MANNER SATISFACTORY TO THE OWNER.
- 7. THE SEWER SYSTEM SHALL HAVE A MINIMUM GROUND COVER OF 4' WHEN CROSS COUNTRY AND A MINIMUM GROUND COVER OF 6' WHEN BENEATH PAVEMENT. IF THE REQUIRED MINIMUM AMOUNT OF COVER CANNOT BE OBTAINED, INSTALL 4" OF RIGID INSULATION ABOVE THE SEWER LINE.
- 8. THE PROPOSED SEWER LINE FROM THE EXISTING SMH TO BUILDING 1 WAS SIZED AND DESIGNED FOR A POSSIBLE FUTURE CONNECTION WITH MAP LOT 12-03-1. IF A FUTURE CONNECTION IS NOT ANTICIPATED, THE OWNER MAY REDUCE THE SIZE OF THE PIPE AND RAISE THE PROPOSED SEWER RUN WITH APPROVAL OF THE DESIGN ENGINEER.
- 9. THE CONTRACTOR SHALL CONFIRM THE EXISTING SEWER MANHOLE TIE—IN INVERT AND THE ELEVATIONS FOR ALL SEWER PIPE RUNS PRIOR TO ANY INSTALLATION.
- 10. REFER TO PLANS TITLED "WATER MAIN DESIGN" BY KLEINFELDER DATED APRIL 2016, FOR WATER LINE INSTALLATION FROM RANGER DRIVE UP DENNETT ROAD TO THE ENTRANCE OF THE PROJECT SITE.
- 11. THE PROPOSED WATER LINE CONFIGURATION SHOWN ON THESE PLANS IS BASED ON DUCTILE IRON PIPE WITH 22.5° AND 45° BENDS. THE CONTRACTOR MAY SUBSTITUTE DUCTILE IRON PIPE FOR HDPE.
- 12. ALL ELECTRIC MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE AS WELL AS STATE AND LOCAL CODES.
- 13. INSTALL NYLON PULL ROPES IN UNDERGROUND CONDUITS TO FACILITATE PULLING CABLES.
- 14. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL HANDHOLES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
- 15. THE EXACT LOCATION, NUMBER, TYPE, AND SIZE OF NEW UTILITY SERVICES AND CONDUITS SHALL BE DETERMINED BY THE UTILITY COMPANY.
- 16. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL CODES.
- 20. CONTRACTOR TO COORDINATE UNDERGROUND ELECTRIC, INCLUDING BUT NOT LIMITED TO SIZE, LOCATION, MATERIAL, CONDUIT, AND HAND HOLES
- 21. ALL ON-SITE UTILITIES SHALL BE UNDERGROUND.
- 22. BACKFLOW PREVENTORS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
- 23. ALL FIRE PROTECTION FOR THE BUILDINGS SHALL BE COORDINATED WITH THE TOWN OF KITTERY FIRE DEPARTMENT AND STATE FIRE MARSHALL. REFER TO UTILITY PLANS FOR ADDITIONAL NOTES.

CONSTRUCTION SEQUENCE:

- 1. INSTALL SILT SOCK, MULCH BERMS AND CONSTRUCTION ENTRANCE AS SHOWN, PRIOR TO THE START OF ANY CONSTRUCTION.
- 2. REMOVE AND DISPOSE OF EXISTING VEGETATION AS SHOWN
- 3. STRIP THE TOPSOIL AND STOCKPILE ONSITE. CONSTRUCT A SILT SOCK PERIMETER AROUND ALL STOCKPILES.
- 4. BLAST AND REMOVE LEDGE AS REQUIRED FOR BUILDING AND UTILITIES.
- 5. CONSTRUCT THE BUILDING FOOTINGS, FOUNDATION WALLS AND PLACE BACKFILL.
- 6. CONSTRUCT AND STABILIZE CUT AND FILL SLOPES. APPLY TEMPORARY (OR PERMANENT) SEED AND MULCH WITHIN 72 HOURS OF THEIR CONSTRUCTION.
- . INSTALL ALL DRAINAGE, WATER, SEWER, ELECTRIC, TELECOM AND GAS UTILITIES.
- INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES. MINIMIZE EXTENT AND DURATION OF EXPOSURE OF DISTURBED AREAS.
- 9. CONSTRUCT THE BUILDINGS.
- 10. PLACE ROADWAY SELECTS AND INSTALL BINDER PAVING COURSE.
- 11. INSTALL VERTICAL GRANITE CURBING AND POUR CONCRETE SIDEWALKS.
- 12. INSTALL LANDSCAPE PLANTINGS.
- 13. INSTALL SCREENED LOAM (4" MIN.) ON ALL DISTURBED SURFACES AND APPLY PERMANENT SEEDING.
- 14. INSTALL FINISH PAVEMENT, PAVEMENT MARKINGS AND SIGNAGE.
- 15. REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES. CLEAN THE ENTIRE STORMWATER SYSTEM OF ALL SEDIMENT AND DEBRIS, WITHIN THE LIMIT OF WORK.

AC ADJ AE AE	BANDONED SBESTOS CONCRETE DJUST PPROXIMATE OTTOM= OTTOM OF CURB ITUMINOUS CONCRETE BERM ITUMINOUS CONCRETE UILDING OTTOM OF SLOPE ROKEN WHITE LANE LINE OTTOM OF WALL ATCH BASIN ATCH BASIN ROUND ATCH BASIN SQAURE AST IRON AST IRON CEMENT LINED AST IN PLACE ENTER LINE HAIN LINK FENCE ORRUGATED METAL PIPE LEAN OUT OLUMN ONCRETE ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON UCTILE IRON UCTILE IRON UCTILE IRON UCTILE IRON ELECTRIC LECTRIC MANHOLE XISTING LARED END SECTION NISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ONIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT EON PIPE GHT POLE ANDSCAPED EFT	EXISTING CC SGC VGC L L L L L L L L L L L L	PROPOSED CC SGC VGC VGC PROPOSED CC SGC VGC CC SGC CC SGC VGC CC SGC CC SGC CC SGC CC SGC CC SGC CC SGC SG	PROPERTY LINE RIGHT OF WAY BUILDING SETBACK PARKING SETBACK SURVEY MONUMENT EDGE OF PAVEMENT EDGE OF CONCRETE CONCRETE CURB SLOPED GRANITE CURB VERNAL POOL/STREAM WETLANDS VERNAL POOL/STREAM BUFF SAWCUT BUILDING BUILDING ENTRANCE BOLLARD SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEI ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL DRAIN
ADJ AF APPROX AF BE	DJUST PPROXIMATE OTTOM= OTTOM OF CURB ITUMINOUS CONCRETE BERM ITUMINOUS CONCRETE UILDING OTTOM OF SLOPE ROKEN WHITE LANE LINE OTTOM OF WALL ATCH BASIN ATCH BASIN ROUND ATCH BASIN SQAURE AST IRON AST IRON AST IRON CEMENT LINED AST IN PLACE ENTER LINE HAIN LINK FENCE ORRUGATED METAL PIPE LEAN OUT OLUMN ONCRETE ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT VON PIPE GHT POLE ANDSCAPED	$\begin{array}{c c} & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$	CC SGC VGC VGC	RIGHT OF WAY BUILDING SETBACK PARKING SETBACK SURVEY MONUMENT EDGE OF PAVEMENT EDGE OF CONCRETE CONCRETE CURB SLOPED GRANITE CURB VERNAL POOL/STREAM WETLANDS VERNAL POOL/STREAM BUFF SAWCUT BUILDING BUILDING ENTRANCE BOLLARD SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
APPROX B= BC	PPROXIMATE OTTOM= OTTOM OF CURB ITUMINOUS CONCRETE UILDING OTTOM OF SLOPE ROKEN WHITE LANE LINE OTTOM OF SLOPE ROKEN WHITE LANE LINE OTTOM OF WALL ATCH BASIN ATCH BASIN ROUND ATCH BASIN SQAURE AST IRON AST IRON CEMENT LINED AST IN PLACE ENTER LINE HAIN LINK FENCE ORRUGATED METAL PIPE LEAN OUT OLUMN ONCRETE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	$\begin{array}{c c} & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$	CC SGC VGC VGC	BUILDING SETBACK PARKING SETBACK SURVEY MONUMENT EDGE OF PAVEMENT EDGE OF CONCRETE CONCRETE CURB SLOPED GRANITE CURB VERTICAL GRANITE CURB VERNAL POOL/STREAM WETLANDS VERNAL POOL/STREAM BUFF SAWCUT BUILDING BUILDING ENTRANCE BOLLARD SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEI ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
BC BI CONC BI BI BI BI BI CONC BI	OTTOM OF CURB ITUMINOUS CONCRETE BERM ITUMINOUS CONCRETE UILDING OTTOM OF SLOPE ROKEN WHITE LANE LINE OTTOM OF WALL ATCH BASIN ATCH BASIN ROUND ATCH BASIN SQAURE AST IRON AST IRON CEMENT LINED AST IN PLACE ENTER LINE HAIN LINK FENCE ORRUGATED METAL PIPE LEAN OUT OLUMN ONCRETE ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	$\begin{array}{c c} & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$	CC SGC VGC VGC	PARKING SETBACK SURVEY MONUMENT EDGE OF PAVEMENT EDGE OF CONCRETE CONCRETE CURB SLOPED GRANITE CURB VERTICAL GRANITE CURB VERNAL POOL/STREAM WETLANDS VERNAL POOL/STREAM BUFF SAWCUT BUILDING BUILDING ENTRANCE BOLLARD SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
BIT CONC BI BLOG B	ITUMINOUS CONCRETE UILDING OTTOM OF SLOPE ROKEN WHITE LANE LINE OTTOM OF WALL ATCH BASIN ATCH BASIN ROUND ATCH BASIN SQAURE AST IRON AST IRON AST IRON CEMENT LINED AST IN PLACE ENTER LINE HAIN LINK FENCE ORRUGATED METAL PIPE LEAN OUT OLUMN ONCRETE ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION NISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	$\begin{array}{c c} & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$	CC SGC VGC VGC	SURVEY MONUMENT EDGE OF PAVEMENT EDGE OF CONCRETE CONCRETE CURB SLOPED GRANITE CURB VERTICAL GRANITE CURB VERNAL POOL/STREAM WETLANDS VERNAL POOL/STREAM BUFF SAWCUT BUILDING BUILDING ENTRANCE BOLLARD SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION MONITORING WELL
BLDG BS BWLL BF BWCB CB CCBRND CA	UILDING OTTOM OF SLOPE ROKEN WHITE LANE LINE OTTOM OF WALL ATCH BASIN ATCH BASIN ROUND ATCH BASIN SQAURE AST IRON AST IRON CEMENT LINED AST IN PLACE ENTER LINE HAIN LINK FENCE ORRUGATED METAL PIPE LEAN OUT OLUMN ONCRETE ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	SGC VGC VGC EN	SGC VGC VGC	EDGE OF CONCRETE CONCRETE CURB SLOPED GRANITE CURB VERTICAL GRANITE CURB VERNAL POOL/STREAM WETLANDS VERNAL POOL/STREAM BUFF SAWCUT BUILDING BUILDING ENTRANCE BOLLARD SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
BS BBW BC CAR BBW BC CAR BBW BC CAR CAR CAR BBW BC CAR CAR CAR CAR CAR CAR CAR CAR CAR CA	ROKEN WHITE LANE LINE OTTOM OF WALL ATCH BASIN ATCH BASIN ROUND ATCH BASIN SQAURE AST IRON AST IRON CEMENT LINED AST IN PLACE ENTER LINE HAIN LINK FENCE ORRUGATED METAL PIPE LEAN OUT OLUMN ONCRETE ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	SGC VGC VGC EN	SGC VGC VGC	CONCRETE CURB SLOPED GRANITE CURB VERTICAL GRANITE CURB VERNAL POOL/STREAM WETLANDS VERNAL POOL/STREAM BUFF SAWCUT BUILDING BUILDING ENTRANCE BOLLARD SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
BW CACACACACACACACACACACACACACACACACACACA	OTTOM OF WALL ATCH BASIN ATCH BASIN ROUND ATCH BASIN SQAURE AST IRON AST IRON CEMENT LINED AST IN PLACE ENTER LINE HAIN LINK FENCE ORRUGATED METAL PIPE LEAN OUT OLUMN ONCRETE ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	SGC VGC VGC EN	SGC VGC VGC	SLOPED GRANITE CURB VERTICAL GRANITE CURB VERNAL POOL/STREAM WETLANDS VERNAL POOL/STREAM BUFF SAWCUT BUILDING BUILDING ENTRANCE BOLLARD SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
CB CARNO CACCOCCONST. CCCCONST. CCCCONST. CCCCONST. CCCCCONST. CCCCCONST. CCCCCONST. CCCCCONST. FLIC CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	ATCH BASIN ATCH BASIN ROUND ATCH BASIN SQAURE AST IRON AST IRON CEMENT LINED AST IN PLACE ENTER LINE HAIN LINK FENCE ORRUGATED METAL PIPE LEAN OUT OLUMN ONCRETE ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	VGC VGC	VGC	VERTICAL GRANITE CURB VERNAL POOL/STREAM WETLANDS VERNAL POOL/STREAM BUFF SAWCUT BUILDING BUILDING ENTRANCE BOLLARD SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION MONITORING WELL
CBSQ CICL CIP CLF CMP COL CONST. CCC CONST.	ATCH BASIN SQAURE AST IRON AST IRON CEMENT LINED AST IN PLACE ENTER LINE HAIN LINK FENCE ORRUGATED METAL PIPE LEAN OUT OLUMN ONCRETE ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED			VERNAL POOL/STREAM WETLANDS VERNAL POOL/STREAM BUFF SAWCUT BUILDING BUILDING ENTRANCE BOLLARD SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION MONITORING WELL
CI CICL CARCILLA CARCALLA CARC	AST IRON AST IRON CEMENT LINED AST IN PLACE ENTER LINE HAIN LINK FENCE ORRUGATED METAL PIPE LEAN OUT OLUMN ONCRETE ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	EN O	98 	WETLANDS VERNAL POOL/STREAM BUFF SAWCUT BUILDING BUILDING ENTRANCE BOLLARD SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEI ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
CIP Q CE CLF CMP CO COL CONC CONST. CP CR DHW DI DICL DIA DMH DWG DYCL EL, ELEV ELEC EMH EXIST FFE FM GC GG GM GR GH HH HORIZ HR HVAC HYD INV IP LS LT MC MAX MEP MHW MIN NO, # NITS OCS OH PB PERF PL PROP PSI PVC PVI R=CP RC RE RC RE RC RE RC RE RC RE RC RC RE RC	AST IN PLACE ENTER LINE HAIN LINK FENCE ORRUGATED METAL PIPE LEAN OUT OLUMN ONCRETE ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	EN O	98 	VERNAL POOL/STREAM BUFF SAWCUT BUILDING BUILDING ENTRANCE BOLLARD SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEI ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION MONITORING WELL
Q CLF CMP CO COL CONC CONST. CP CR DHW DI DICL DIA DMH DWG DYCL ELEC EMH EXIST FES FFE FM GC GG GM GR GW HDPE HH HORIZ HR HVAC HYD IN IP LS LT MC MAX MEP MHW MIN NO, # NITS OCS OH PB PERF PL PROP PSI PVC PVI R=CP RC RE RC	ENTER LINE HAIN LINK FENCE ORRUGATED METAL PIPE LEAN OUT OLUMN ONCRETE ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	EN O	98 	SAWCUT BUILDING BUILDING ENTRANCE BOLLARD SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION MONITORING WELL
CMP CO COL CONST. CO CO CONST. CO CO CONST. CO CO CONST. CO CO CO CONST. CO	ORRUGATED METAL PIPE LEAN OUT OLUMN ONCRETE ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	EN O	98 	BUILDING BUILDING ENTRANCE BOLLARD SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
CO COL CONC CONST. CO CO CONST. CO CO CONST. CO	LEAN OUT OLUMN ONCRETE ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	EN O	98 	BUILDING ENTRANCE BOLLARD SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
CONC CONST. CP CR DHW DI DICL DIA DI DICL DIA DI DO DICL DIA DI DO	ONCRETE ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	○	©	SIGN TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
CONST. CP CR CR DHW DI	ONSTRUCT ONCRETE PIPE ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED		©	TREE FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
CR DHW DE DI DICL DIA DI DICL DIA DMH DWG DYCL ELEC EMH EXIST FES FFE FM GC GG GM GR GH HH HORIZ HH HORIZ HH HORIZ HH HORIZ HNV IP LS LT MC MAX MEP MHW MIN NO, # NTS OCS OH PB PERF PL PROP PSI PVC PVI R= RCP RCP RCP RCP RCP RCP RCP RCC SMH	ONDENSATE RETURN ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED		-> -> -> -> -> -> -> -> -> -> -> -> -> -	FENCE SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
DHW DI DI DI DICL DIA DI DIA DI DMH DWG DYCL ELEV ELEC EMH EXIST FFE FM GC GG GM GR GH HH HORIZ HH HORIZ HH HORIZ HH HORIZ HR HVAC HYD IN IP LS LT MC MAX MEP MHW MIN NO, # NTS OCS OH PB PERF PL PROP PSI PVC PVI R RCP RCP RCP RCP RCP RCP RCP RCP RCP R	ESIGN HIGH WATER UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	->	-> -> -> -> -> -> -> -> -> -> -> -> -> -	SILT SOCK DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
DI DICL DI DICL	UCTILE IRON UCTILE IRON CEMENT LINED IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	->	100 SWL DYL L L L VAN ×97.5 T L L	DRAINAGE FLOW SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
DIA DMH DF DWG DYCL ELEC ELEC EMH EXIST FES FFE FM GC GG GM GR GH HH HORIZ HH HORIZ HH HORIZ HN HVAC HYD IN IP LS LT MC MAX MEP MHW MIN NO, # NTS OCS OH PB PERF PL PROP PSI PVC PVI R= RCP RCP RCP RCP RCP RCP RCP RCC RCC SMH	IAMETER RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	->	100 SWL DYL L L L VAN ×97.5 T L L	SWALE MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
DMH DWG DF DYCL ELEC ELEC EMH EXIST FES FFE FM GC GG GM GR	RAIN MANHOLE RAWING OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	10 SWL DYL L L VAN ×97.5 P S	100 SWL DYL L L L VAN ×97.5 T L L	MINOR CONTOUR MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
DYCL EL, ELEV ELEC EMH EXIST FES FFE FM GC GG GG GR GH HH HORIZ HH HORIZ HH HORIZ HVAC HYD IN IP LS LT MC MAX MEP MHW MIN NO, # NTS OCS OH PB PERF PL PROP PSI PVC PVI R= RCP RCP RCP RCP RCP RCS SMH	OUBLE YELLOW CENTER LINE LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	10 SWL DYL L L VAN ×97.5 P S	100 SWL DYL L L L VAN ×97.5 T L L	MAJOR CONTOUR PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
EL, ELEV ELEC EMH EXIST FES FFE FM GC GG GM GR HDPE HH HORIZ HR HVAC HYD IN IP LS LT MC MAX MEP MHW MIN NO, # NTS OCS OH PB PERF PL PROP PSI PVC PVI R=CP RD (rec) RET RT SGC SMH	LEVATION LECTRIC LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	10 SWL DYL L L VAN ×97.5 P S	© SWL DYL DYL Language Swan 24. 24. 24. VAN × 97.5 □	PARKING COUNT SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN-ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
EMH EXIST FES FL FFE FFE FM GC GG GM GR GW HDPE HH HORIZ HR HVAC HYD INV IP LS LT MC MAX MEP MHW MIN NO, # NTS OCS OH PB PERF PL PROP PSI PVC PVI R= RCP RD (rec) RET RT SGC SMH	LECTRIC MANHOLE XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	SWL DYL L VAN × 97.5 S S S	SWL DYL L L L L L L L L L L L L	SINGLE WHITE LINE DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN—ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
EXIST FES FL FFE FM GC GG GG GM GA GR	XISTING LARED END SECTION INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	DYL	DYL Line Section 1.	DOUBLE YELLOW LINE STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN-ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
FFE FILE FM FC GC GF GG GA GR	INISH FLOOR ELEVATION ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED		€, van × 97.5 ••	STOP LINE CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN-ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
FM	ORCE MAIN RANITE CURB AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED		€, van × 97.5 ••	CROSSWALK ACCESSIBLE CURB RAMP DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN-ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
GG GM GR GR GW GL HDPE HI HH HORIZ HR HVAC HE HVAC HYD INV IP LS LT MC MAX MEP MHW MIN NO, # NTS OCS OH PB PERF PL PROP PSI PVC PVI R= RCP RD (rec) RET RT SGC SMH	AS GATE AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED		€, van × 97.5 ••	DETECTABLE WARNING PANEL ACCESSIBLE PARKING VAN-ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
GM GR GR GR GW HDPE HH HH HORIZ HR HVAC HYD INV IN IP LP LS LT MC MAX MEP MHW MIN NO, # NTS OCS OH PB PERF PL PROP PSI PVC PVI R= RCP RD (rec) RET RT SGC SMH	AS METER UARDRAIL UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED		گر VAN × ^{97.5} • •	ACCESSIBLE PARKING VAN-ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
GW HDPE HI HH HORIZ HR HVAC HYD INV IP LS LT MC MAX MEP MHW MIN NO, # NTS OCS OH PB PERF PL PROP PSI PVC PVI R= RCP RD (rec) RET RT SGC SMH	UY WIRE IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED		É. VAN × ^{97.5} € □	VAN-ACCESSIBLE PARKING SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
HDPE HH HH HORIZ HR HVAC HYD INV IN IP LP LS LT MC MAX MEP MH MIN MIN NO, # NTS OCS OH PB PERF PL PROP PSI PVC PVI R= RCP RD (rec) RET RT SGC SMH	IGH DENSITY POLYETHYLENE AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	97.5	× ^{97.5} € □	SPOT ELEVATION KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
HH HA H	AND HOLE ORIZONTAL ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	₩■□= = = = = = = = = = = = = = = = = = =	€ ■	KSAT TEST LOCATION TEST PIT LOCATION MONITORING WELL
HR HVAC HE HVAC HYD INV IN IP LP LS LT MC MAX MEP MHW MIN NO, # NTS OCS OH PB PERF PL PROP PSI PVC PVI R= RCP RD (rec) RET RT RG SGC SMH	ANDRAIL EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE GHT POLE ANDSCAPED	■ □ ===================================		TEST PIT LOCATION MONITORING WELL
HVAC HYD INV IN IP LP LS LT MC MAX MEP MHW MIN NO, # NTS OCS OH PB PERF PL PROP PSI PVC PVI R= RCP RD (rec) RET RT SGC SMH	EAT VENT AIR CONDITIONING YDRANT IVERT RON PIPE IGHT POLE ANDSCAPED	= = = = = = = = = = = = = = = = = = =		MONITORING WELL
INV IP IR LP LIC LS LA LT MC ME MAX MEP MHW MIN NO, # NTS OCS OH OV PB PERF PL PROP PSI PVC PVI R= RCP RD (rec) RET RT RI SGC SMH	IVERT RON PIPE GHT POLE ANDSCAPED	= = = = = = = = = = = = = = = = = = =		
IP IR LP LIC LS LA LT LE MC ME MAX M/ MEP ME MHW ME MIN MI NO, # NC OCS OC OH OV PB PL PERF PE PL PL PROP PF PSI PC PVC PC PVI PC R= RI RCP RE RCP RCP RE RCP RCP RE RCP RCP RCP RE RCP	RON PIPE GHT POLE ANDSCAPED	<u> </u>	D	INPAIN
LS LA LT LE MC ME MAX MA MEP ME MHW ME MIN MI NO, # NU NTS NO OCS OU OH OV PB PL PERF PE PL PL PROP PF PSI PC PVC PC PVI PC R= RI RCP RE RCP R	ANDSCAPED	<u> </u>	6	
LT LE MC ME MAX M/ MEP ME MHW ME MIN MI NO, # NU NTS NO OCS OU OH OV PB PL PERF PE PL PL PROP PF PSI PO PVC PVI PVC PVI PVC PVI R= RII RCP RE RCP RE RD RO (rec) RE RT RE RT RE SGC SL SMH		—— OH W ———	—— S —————————————————————————————————	OL WEIX
MAX MAX MEP ME MHW ME MIN MI NO, # NU NTS OCS OU OH ON PB PU PERF PE PL PL PROP PF PSI PC PVC PC PVI PC R= RI RCP RE RD (rec) RE RT RE RT RE SGC SL SMH		W	w	WATER
MEP ME MHW ME MIN MI NO, # NU NTS NO OCS OU OH OV PB PL PERF PE PL PL PROP PF PSI PC PVC PC PVI PC R= RI RCP RE RCP RE RD RO (rec) RE RT RE RT RE RT RE SGC SL SMH	ETAL COVER AXIMUM	FP	FP	
MHW ME MIN MI NO, # NU NTS NO OCS OU OH OV PB PL PERF PE PL PL PROP PF PSI PO PVC PO PVI PO R= RII RCP RE RD (rec) RE RT RE RT RE SGC SL SMH	ECHANICAL/ELECTRICAL/PLUMBING	—— G ———	—— G ———	GAS
NO, # NU NTS NO OCS OU OH OV PB PL PERF PE PL PL PROP PF PSI PC PVC PC PVI PC R= RII RCP RE RCP RE RD (rec) RE RT RE SGC SL SMH	EAN HIGH WATER	—— UE ———	—— UE ———	UNDERGROUND ELECTRIC
NTS	INIMUM UMBER	—— ST ———	—— ST ———	STEAM
OH ON PB PUBLISHED PERF PE PL PL PL PL PL PL PL PL PL PVC PC PC PVI PC PVI PC R= RI RCP RE RD (rec) RET RE RT RE SGC SL SMH SE	OT TO SCALE	— т —	— т ——	TELEPHONE
PB PL PERF PE PL PL PROP PF PSI PC PVC PC PVI PC R= RII RCP RE RD RC (rec) RE RET RE RT RI SGC SL SMH SE	UTLET CONTROL STRUCTURE VERHANG	₩	<u> </u>	CATCH BASIN
PL PL PROP PF PSI PC PVC PC PVI PC R= RI RCP RE RD RC (rec) RET RT RE RT RI SGC SL SMH SE	ULL BOX		(H)	DOUBLE CATCH BASIN
PROP PF PSI PC PVC PC PVI PC R= RI RCP RE RD RC (rec) RE RET RE RT RI SGC SL SMH SE	ERFORATED LASTIC	© _	©	DRAIN MANHOLE
PVC PC PVI PC R= RI RCP RE RD RC (rec) RE RET RE RT RI SGC SL SMH SE	ROPOSED	□ ○ ^{CO}	°co	PLUG OR CAP CLEANOUT
PVI PC R= RI RCP RE RD RC (rec) RE RET RE RT RI SGC SL SMH SE	OUNDS PER SQUARE INCH OLYVINYL CHLORIDE			HEADWALL
RCP RE RD RC (rec) RE RET RE RT RI SGC SL SMH SE	OST VALVE INDICATOR	<u> </u>	<u> </u>	SEWER MANHOLE
RD RC (rec) RE RET RE RT SGC SL SMH SE	IM= EINFORCED CONCRETE PIPE	o ^{WSO}	owso	WATER SHUT-OFF
RET RE RT RI SGC SL SMH SE	OOF DRAIN	₩V ⋈	₩V	WATER VALVE & BOX
RT RI SGC SL SMH SE	ECORD	<i>TSV</i> ○₽	TSV o ⊳	TAPPING SLEEVE, VALVE&BOX
SGC SL SMH SE	ETAINING IGHT	HYD ♥₽	₩ Ċ	FIRE HYDRANT
	LOPED GRANITE CURB	4	1	THRUST BLOCK
	EWER MANHOLE EASONAL HIGH WATER TABLE	O ^{PIV} GV	o ^{PIV} GV	POST INDICATOR VALVE
	ANITARY SEWER	\bowtie	GV ⋈	GAS GATE
	TEAM TATION	© ¥	©	ELECTRIC MANHOLE
STMH S1	TEAM MANHOLE	*	●■	LIGHT POLE
	IDEWALK OLID WHITE EDGE LINE	T	⊕ ∏	TRANSFORMER PAD
SWLL SC	OLID WHITE LANE LINE	<u> </u>	<u>ი</u>	UTILITY POLE GUY POLE
	OP OF CURB RAFFIC CONTROL BOX	—(-	GUY WIRE & ANCHOR
TEL TE	ELEPHONE		Φ	TELEPHONE MANHOLE
	RAFFIC LIGHT ELEPHONE MANHOLE	_		INLET PROTECTION
TP TE	EST PIT			STONE CHECK DAM
	RANSFORMER OP OF SLOPE		N.	
	OP OF SLOPE OP OF WALL			TREE TO BE REMOVED STABILIZED CONSTRUCTION
TYP TY	YPICAL			STABILIZED CONSTRUCTION ENTRANCE
	TILITY POLE ITRIFIED CLAY			STRUCTURE TO BE REMOVED
VERT VE	ERTICAL			
	ERTICAL GRANITE CURB 'ATER			PAVEMENT TO BE REMOVED
WC W	YE CONNECTION			BITUMINOUS CONCRETE PAVI
WIP WF	ETLAND FLAG			CONCRETE
WM W	ETLAND FLAG 'ATER VALVE 'ROUGHT IRON PIPE			PAVERS
	ATER VALVE		كالبكا ابنا ابنا ابنا الماسي	VERNAL POOL
	'ATER VALVE 'ROUGHT IRON PIPE		777777	BUFFER RESTORATION

SHAWN

TOBEY

PREPARED AS SERVICE AND PROPERTY OF MAY NOT BE DISSEMINATED I ANY MANNER, SE THAN THIS THE WRITTEN I'VE, TANNER.

ַבֶּ ס. בַּבְ

S S O

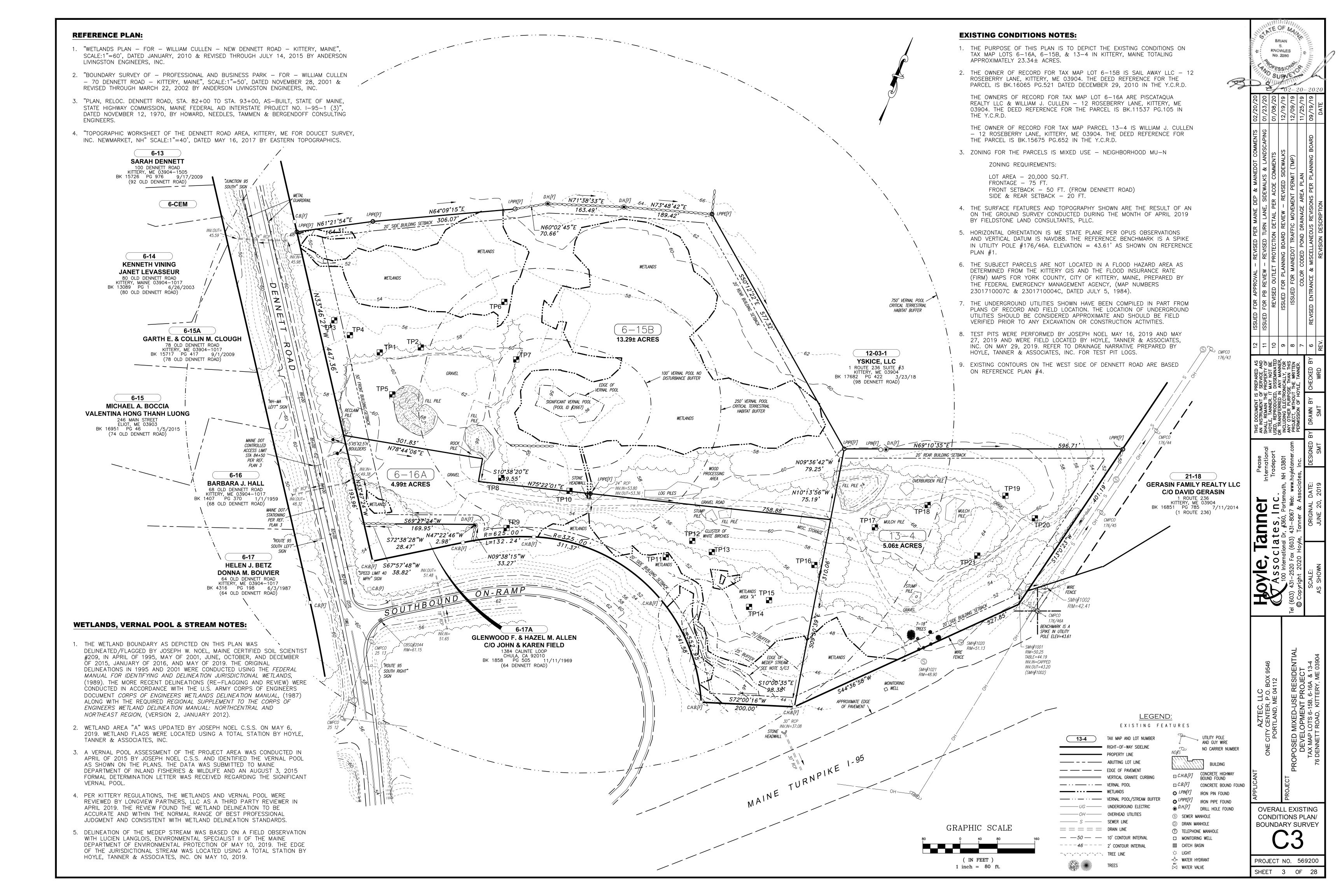
NOTES,

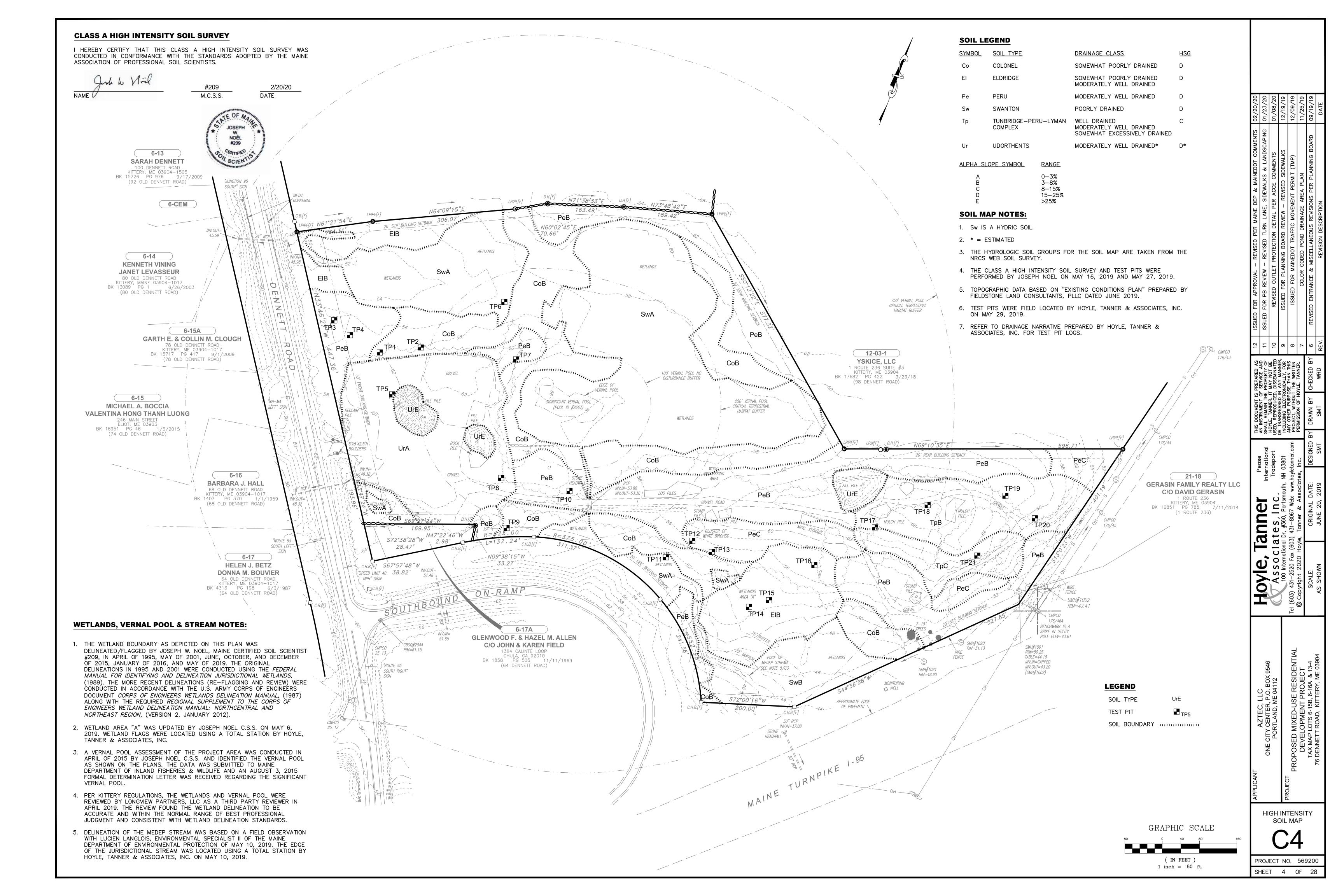
ABBREVIATIONS

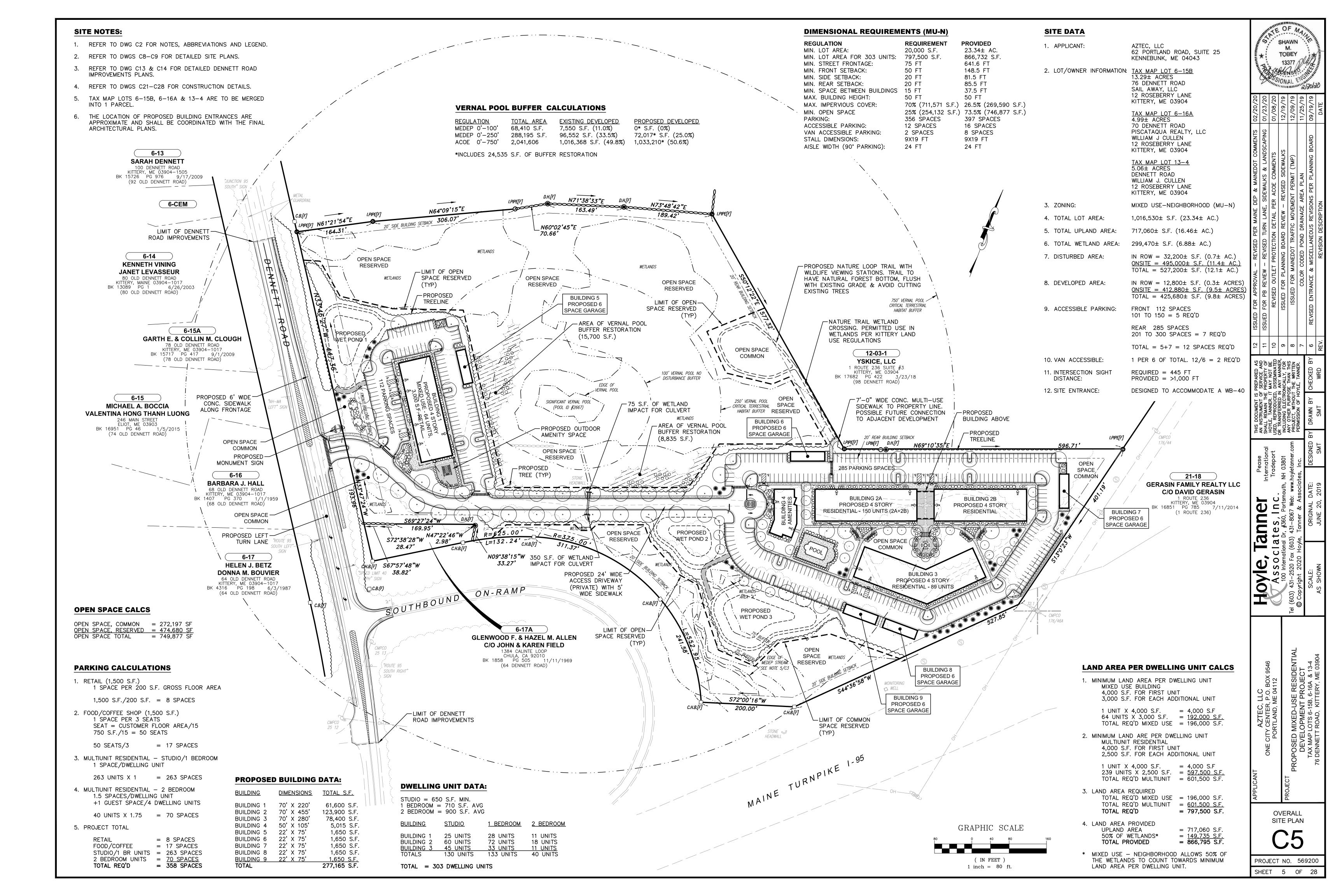
& LEGEND

PROJECT NO. 569200

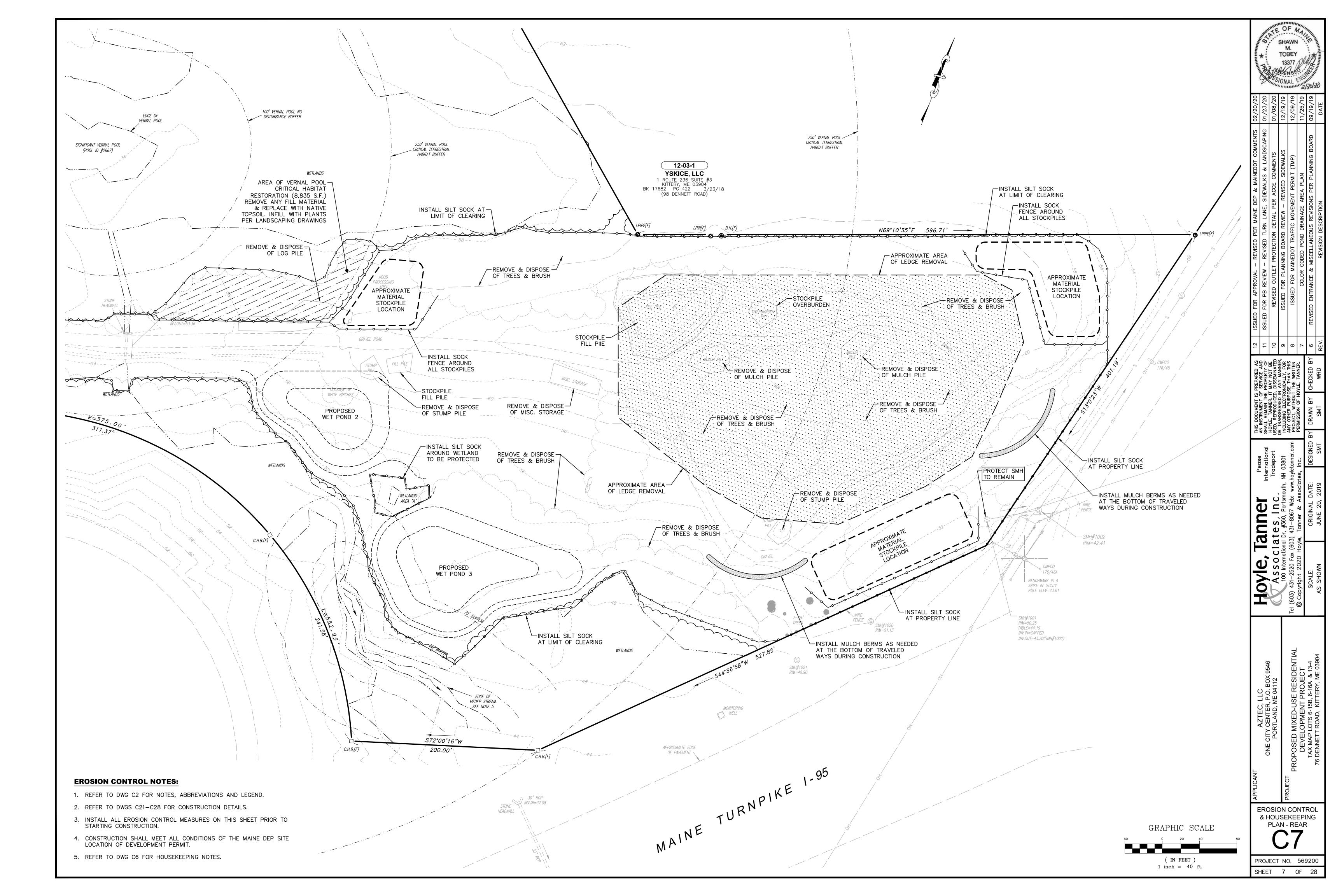
SHEET 2 OF 28

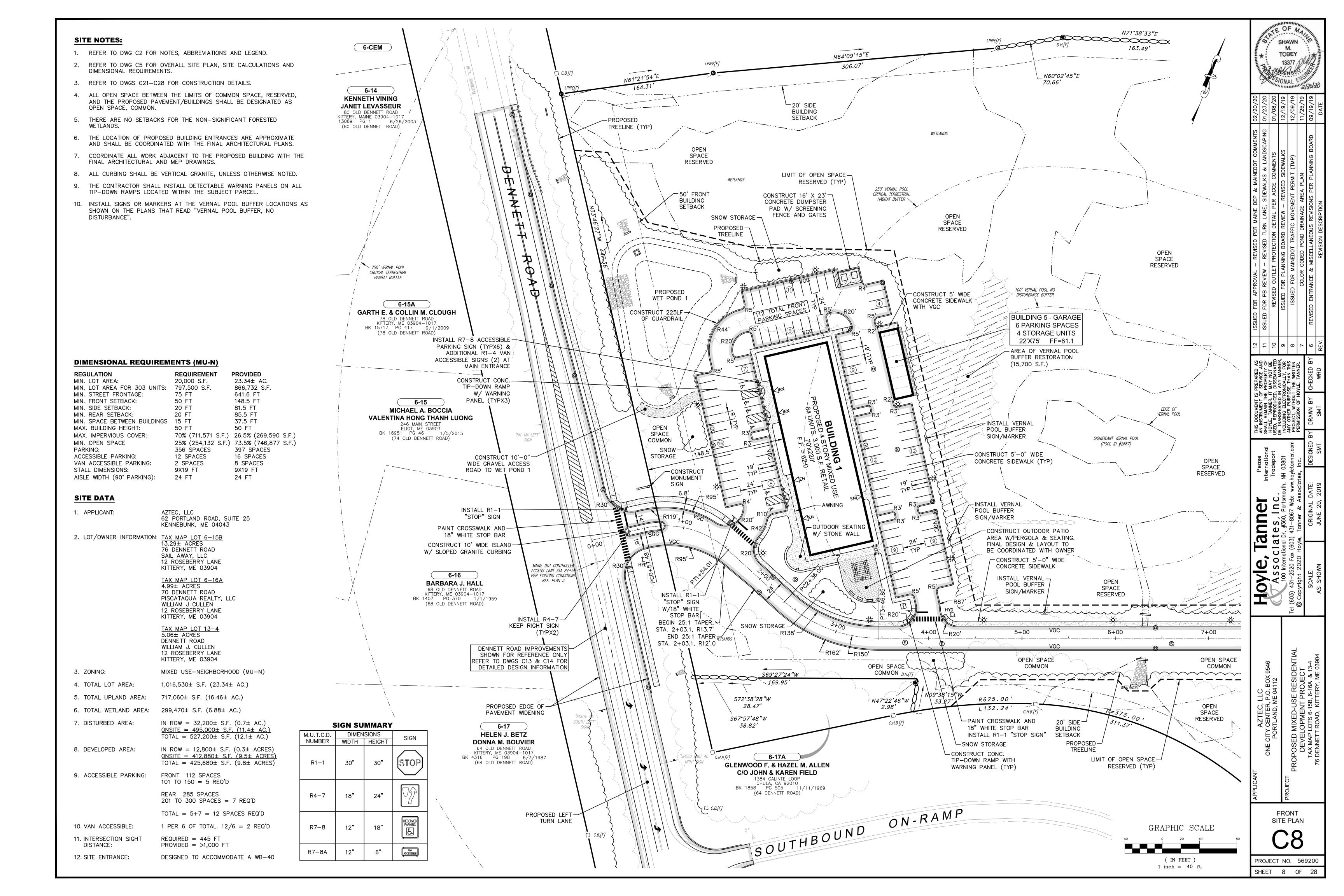


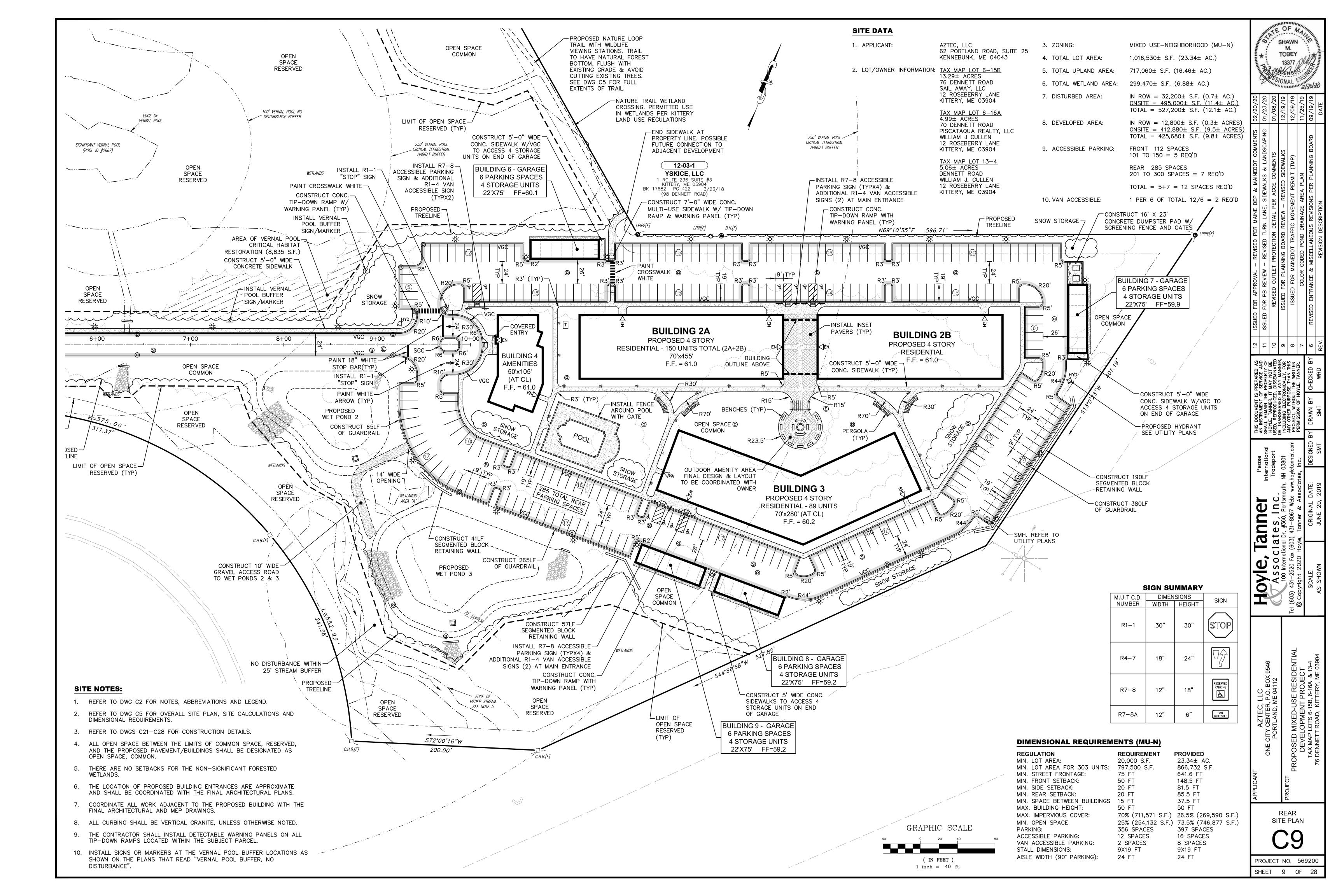




N71°38'33"E **EROSION CONTROL NOTES:** SHAWN 6-CEM N64°09'15"E 1. REFER TO DWG C2 FOR NOTES, ABBREVIATIONS AND LEGEND. TOBEY 306.07 2. REFER TO DWGS C21-C28 FOR CONSTRUCTION DETAILS. N61°21'54"E N60°02'45"E 3. INSTALL ALL EROSION CONTROL MEASURES ON THIS SHEET PRIOR TO 70.66 STARTING CONSTRUCTION. 6-14 4. CONSTRUCTION SHALL MEET ALL CONDITIONS OF THE MAINE DEP SITE **KENNETH VINING** LOCATION OF DEVELOPMENT PERMIT **JANET LEVASSEUR** 80 OLD DENNETT ROAD KITTERY, MAINE 03904-1017 13089 PG 1 6/26/2003 **HOUSEKEEPING NOTES:** (80 OLD DENNETT ROAD) WETLANDS SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES. ANY SPILL OR RELEASE OF TOXIC OR HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE DEPARTMENT. FOR OIL SPILLS, CALL 1-800-482-0777 WETLANDS WHICH IS AVAILABLE 24 HOURS A DAY. FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL, CALL 1-800-452-4664 WHICH IS AVAILABLE 24 250' VERNAL POOL D HOURS A DAY. FOR MORE INFORMATION, VISIT THE DEPARTMENT'S WEBSITE CRITICAL TERRESTRIAL HABITAT BUFFER AT: HTTP://WWW.MAINE.GOV/DEP/SPILLS/EMERGSPILLRESP/ \Box GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO -PROPOSED TREELINE CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS -INSTALL SILT OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" - AREA OF VERNAL POOL BUFFER SOCK AT LIMIT IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, RESTORATION (15,700 S.F.) REMOVE OF CLEARING TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT ANY FILL MATERIAL & REPLACE WITH INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF NATIVE TOPSOIL. INFILL WITH PLANTS SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER PER LANDSCAPING DRAWINGS MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING 750' VERNAL POOL INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT CRITICAL TERRESTRIAL OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE HABITAT BUFFER 仄 INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN 00' VERNAL POOL NO \mathcal{C} **PROPOSED** -REMOVE & DISPOSE -INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION. DISTURBANCE BUFFER WET POND OF TREES & BRUSH 6-15A FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE GARTH E. & COLLIN M. CLOUGH D DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED 78 OLD DENNETT ROAD KITTERY, ME 03904-1017 BK 15717 PG 417 9/1/2009 FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE (78 OLD DENNETT ROÁD) INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY, NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS THAT EXPERIENCE FUGITIVE DUST PROBLEMS SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST. DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION EBRIS. BUILDING AND LANDSCAPING MATERIALS. TRASH. FERTILIZERS. -INSTALL SILT PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER SOCK AROUND MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS 6-15 ALL STOCKPILES MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE. **MICHAEL A. BOCCIA** EXCAVATION DE-WATERING. EXCAVATION DE-WATERING IS THE REMOVAL OF **VALENTINA HONG THANH LUONG** THIS DO AN INS' SHALL HOYLE, USED, R, OR TRAP INCLUD ANY O' PROJEC WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER 246 MAIN STREET ELIOT, ME 03903 BK 16951 PG 46 1 AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER 1/5/2015 EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED (74 OLD DENNETT ROAD) SIGNIFICANT VERNAL POOL AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE (POOL ID #2667) COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE. LIKE A ─INSTALL SILT SOCK AROUND COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW BUFFER RESTORATION UNTIL OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE STABILIZED TAKEN IF APPROVED BY THE DEPARTMENT. REMOVE — **BOULDERS** <u>AUTHORIZED NON-STORMWATER DISCHARGES.</u> IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED STOCKPILE -FILL PILE NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STOCKPILE -STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF FILL PILE APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED **ates** NON-STORMWATER DISCHARGES ÁRE: A. DISCHARGES FROM FIREFIGHTING ACTIVITY; CONSTRUCT STABILIZED CONSTRUCTION ENTRY B. FIRE HYDRANT FLUSHINGS; C. VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING **APPROXIMATE** IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE MATERIAL 6-16 AND TRANSMISSION WASHING IS PROHIBITED); STOCKPILE -REMOVE & DISPOSE BARBARA J. HALL LOCATION OF TREES & BRUSH D. DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS 68 OLD DENNETT ROAD KITTERY, ME 03904-1017 BK 1407 PG 370 1/1/1959 SILT SOCK AND APPENDIX (C)(3); (68 OLD DENNETT ROAD) E. ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS; INSTALL SOCK-F. PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR FENCE AROUND HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED ALL STOCKPILES MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED; WETLANDS MAINTAIN GRAVEL ROAD-FOR ACCESS TO REAR OF G. UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE; SITE DURING CONSTRUCTION INSTALL SILT SOCK-H. UNCONTAMINATED GROUNDWATER OR SPRING WATER; \$69°27'24"W I. FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED; ~ 169.95° J. UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN N09°38'15"W APPENDIX C(5); *S72°38'28"W* R625.00' ₹N47°22'46"W 💭 33.27' 28.47' K. POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND S67°57'48"W L. LANDSCAPE IRRIGATION. 38.82' 6-17 <u>UNAUTHORIZED NON-STORMWATER DISCHARGES.</u> THE DEPARTMENT'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE HELEN J. BETZ **DONNA M. BOUVIER** THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE 64 OLD DENNETT ROAD DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE KITTERY, ME 03904-1017 BK 4316 PG 198 6/3/1987 6-17A C.H.B.[F] DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE (64 OLD DENNETT ROAD) **FOLLOWING: GLENWOOD F. & HAZEL M. ALLEN** C/O JOHN & KAREN FIELD A. WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, 1384 CALINTE LOOP STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CHULA, CA 92010 BK 1858 PG 505 1 PROPOSED TREELINE CONSTRUCTION MATERIALS; (64 DENNETT ROAD) B. FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND SOUTHBOUND ON-RAMP EQUIPMENT OPERATION AND MAINTENANCE; $\ \ \Box \ C.B.[F]$ **EROSION CONTROL** C. SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND & HOUSEKEEPING EQUIPMENT WASHING; AND PLAN - FRONT GRAPHIC SCALE D. TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER C.B.[F] ADDITIONAL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS. (IN FEET) PROJECT NO. 569200 1 inch = 40 ft.SHEET 6 OF 28







GRADING & DRAINAGE NOTES:

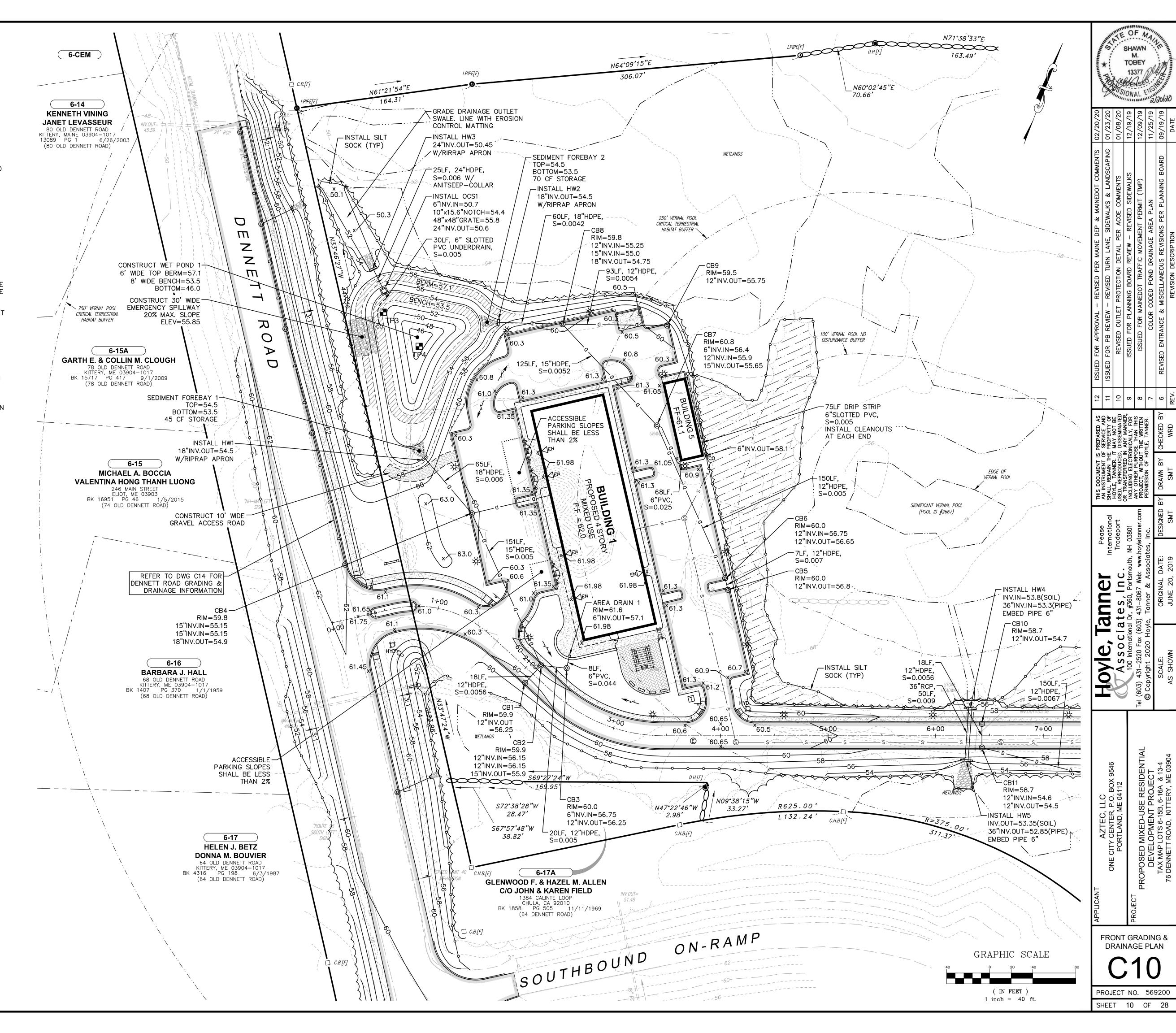
- 1. REFER TO DWG C2 FOR NOTES, ABBREVIATIONS AND LEGEND.
- 2. REFER TO DWG C6-C7 FOR ADDITIONAL EROSION CONTROL MEASURES.
- 3. REFER TO DWGS C21-C28 FOR CONSTRUCTION DETAILS.
- 4. CONSTRUCTION SHALL MEET ALL CONDITIONS OF THE MAINE DEP SITE LOCATION OF DEVELOPMENT PERMIT.
- 5. ALL DRAINAGE STRUCTURES HAVE AN INTERNAL DIAMETER OF 4'-0" UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- 6. INSTALL INLET PROTECTION ON ALL PROPOSED CATCH BASINS AFTER INSTALLATION. REMOVE WHEN CONSTRUCTION IS COMPLETED.
- 7. THE LOCATION OF PROPOSED BUILDING ENTRANCES ARE APPROXIMATE AND SHALL BE COORDINATED WITH THE ARCHITECTURAL PLANS.
- 8. ACCESSIBLE PARKING STALLS HAVE SLOPES LESS THAN 2% IN ALL DIRECTIONS.
- 9. TEST PIT DATA IS BASED ON FIELD OBSERVATIONS FOR LEDGE AND APPROXIMATE SEASONAL HIGH WATER FROM PITS DUG ON MAY 16, 2019 AND MAY 27, 2019.
- 10. REFER TO DRAINAGE NARRATIVE FOR TEST PIT LOGS AND DETAILED WET POND CALCULATIONS.

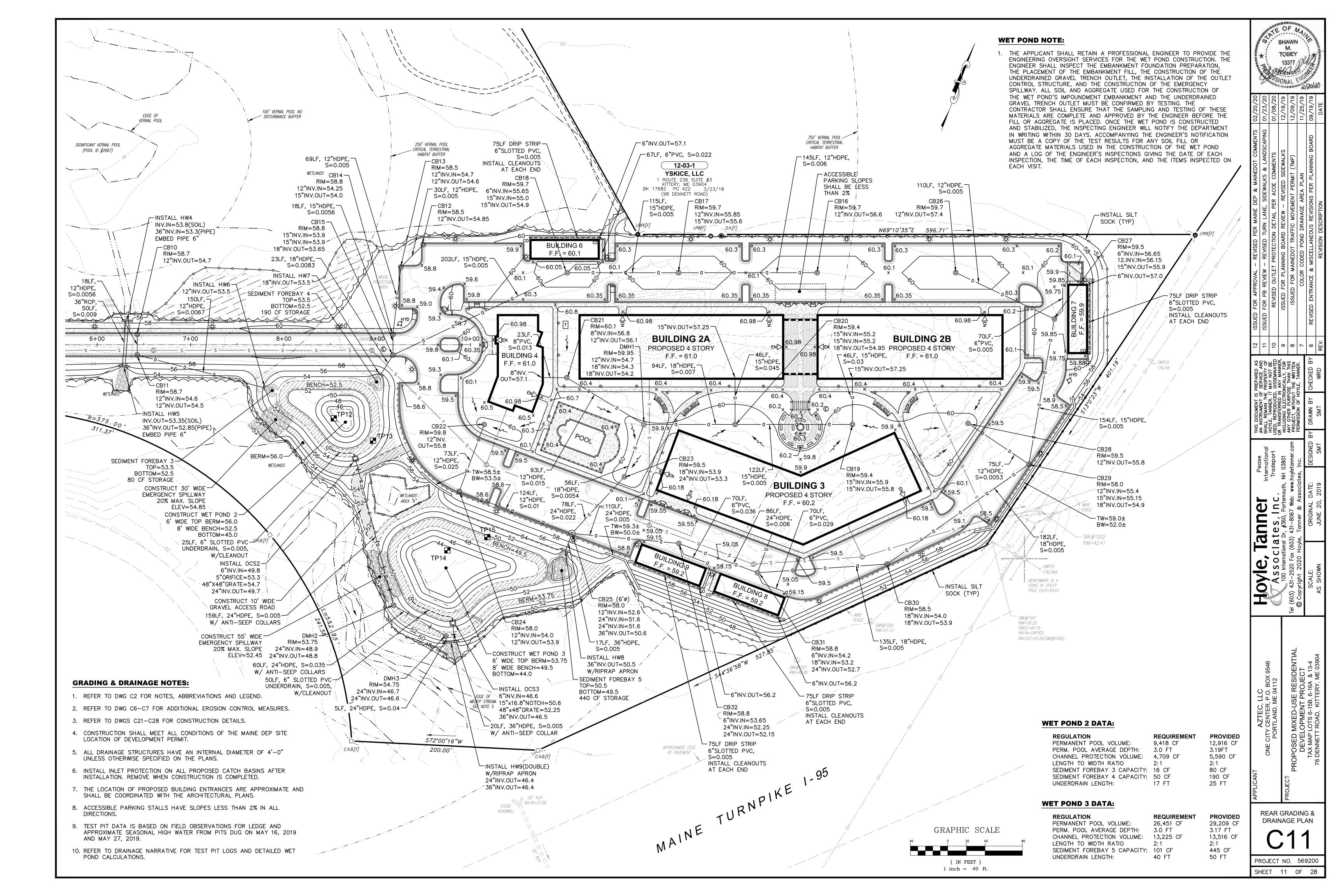
WET POND NOTE:

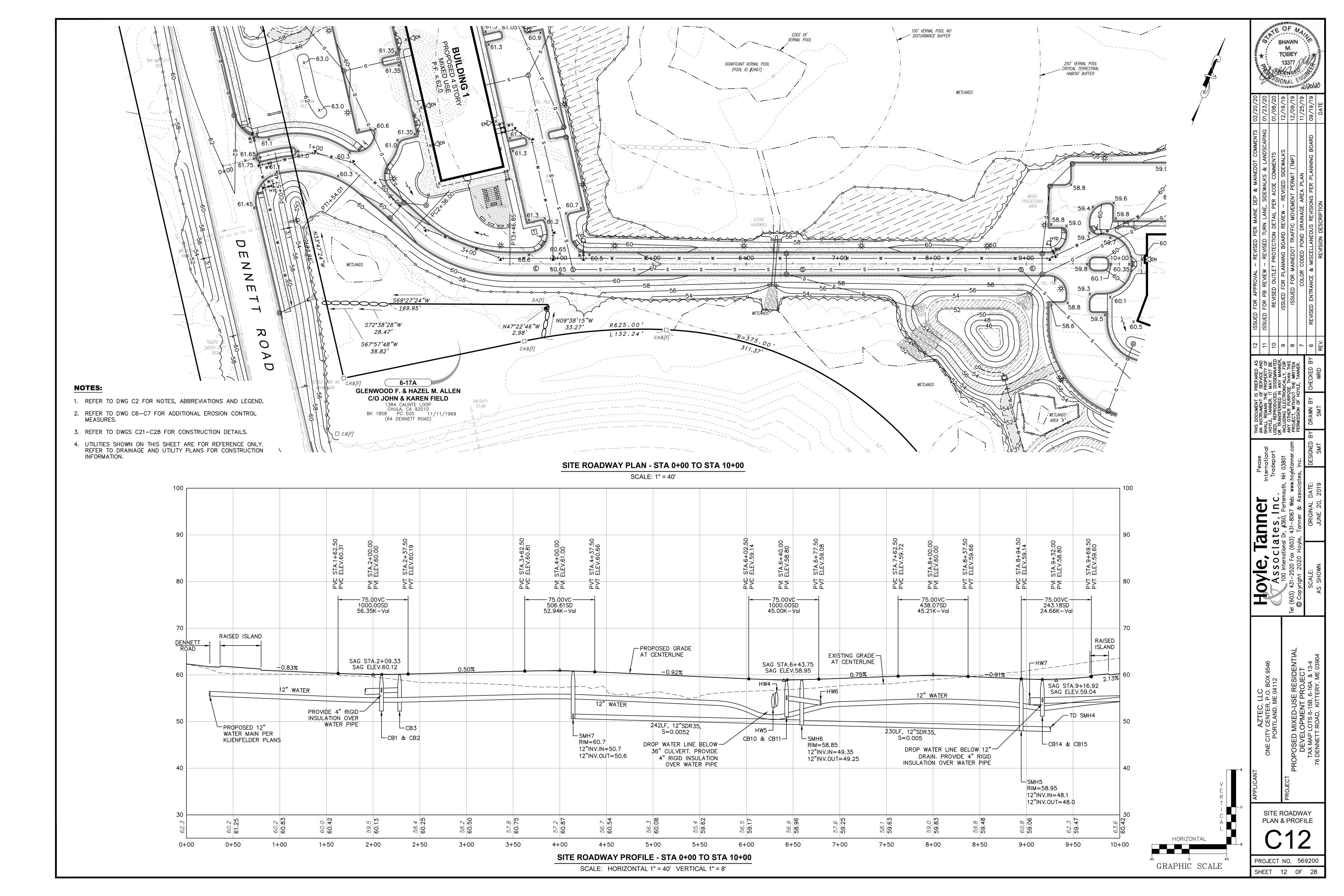
1. THE APPLICANT SHALL RETAIN A PROFESSIONAL ENGINEER TO PROVIDE THE ENGINEERING OVERSIGHT SERVICES FOR THE WET POND CONSTRUCTION. THE ENGINEER SHALL INSPECT THE EMBANKMENT FOUNDATION PREPARATION, THE PLACEMENT OF THE EMBANKMENT FILL, THE CONSTRUCTION OF THE UNDERDRAINED GRAVEL TRENCH OUTLET, THE INSTALLATION OF THE OUTLET CONTROL STRUCTURE, AND THE CONSTRUCTION OF THE EMERGENCY SPILLWAY. ALL SOIL AND AGGREGATE USED FOR THE CONSTRUCTION OF THE WET POND'S IMPOUNDMENT EMBANKMENT AND THE UNDERDRAINED GRAVEL TRENCH OUTLET MUST BE CONFIRMED BY TESTING. THE CONTRACTOR SHALL ENSURE THAT THE SAMPLING AND TESTING OF THESE MATERIALS ARE COMPLETE AND APPROVED BY THE ENGINEER BEFORE THE FILL OR AGGREGATE IS PLACED. ONCE THE WET POND IS CONSTRUCTED AND STABILIZED, THE INSPECTING ENGINEER WILL NOTIFY THE DEPARTMENT IN WRITING WITHIN 30 DAYS. ACCOMPANYING THE ENGINEER'S NOTIFICATION MUST BE A COPY OF THE TEST RESULTS FOR ANY SOIL FILL OR AGGREGATE MATERIALS USED IN THE CONSTRUCTION OF THE WET POND AND A LOG OF THE ENGINEER'S INSPECTIONS GIVING THE DATE OF EACH INSPECTION, THE TIME OF EACH INSPECTION, AND THE ITEMS INSPECTED ON EACH VISIT.

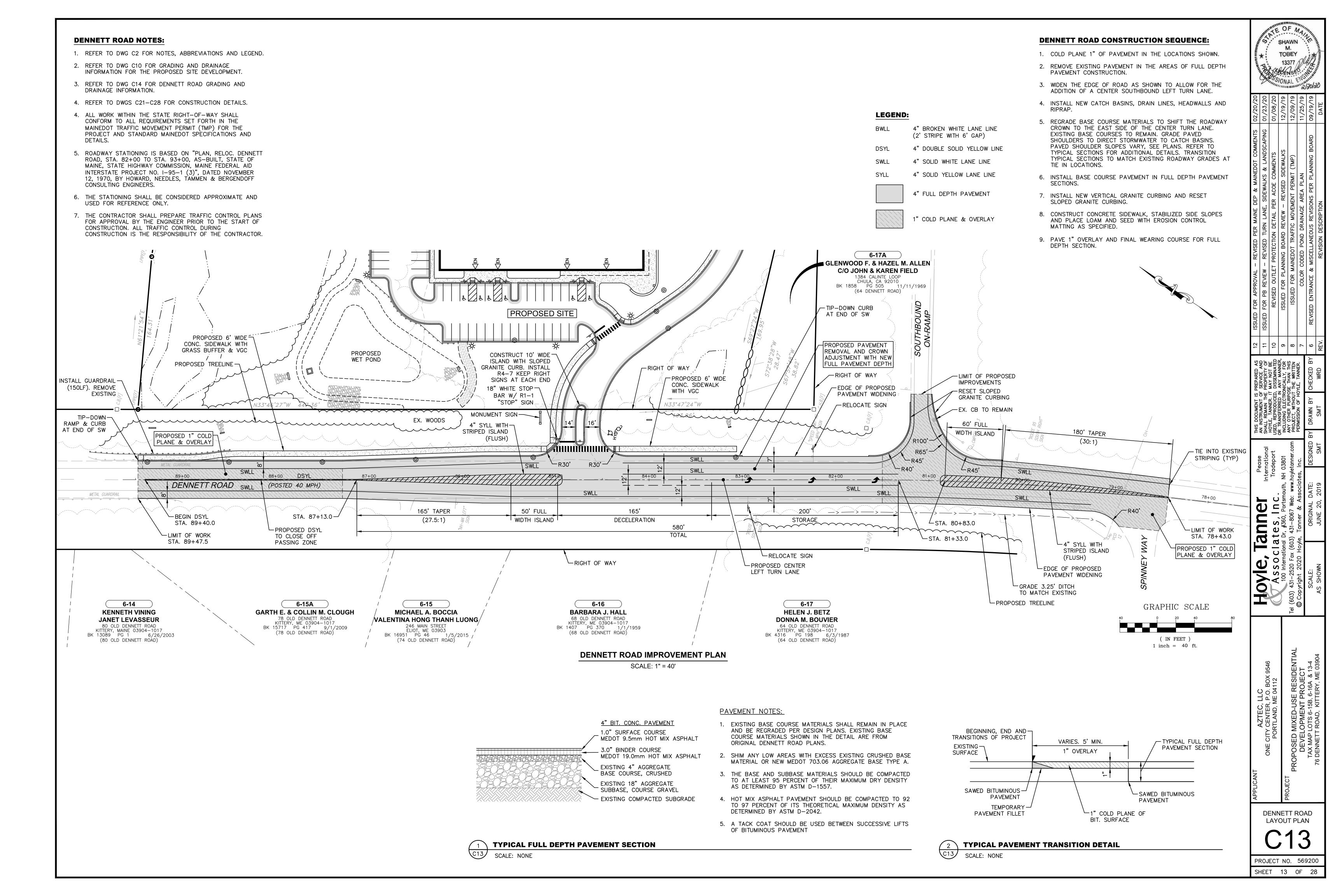
WET POND 1 DATA:

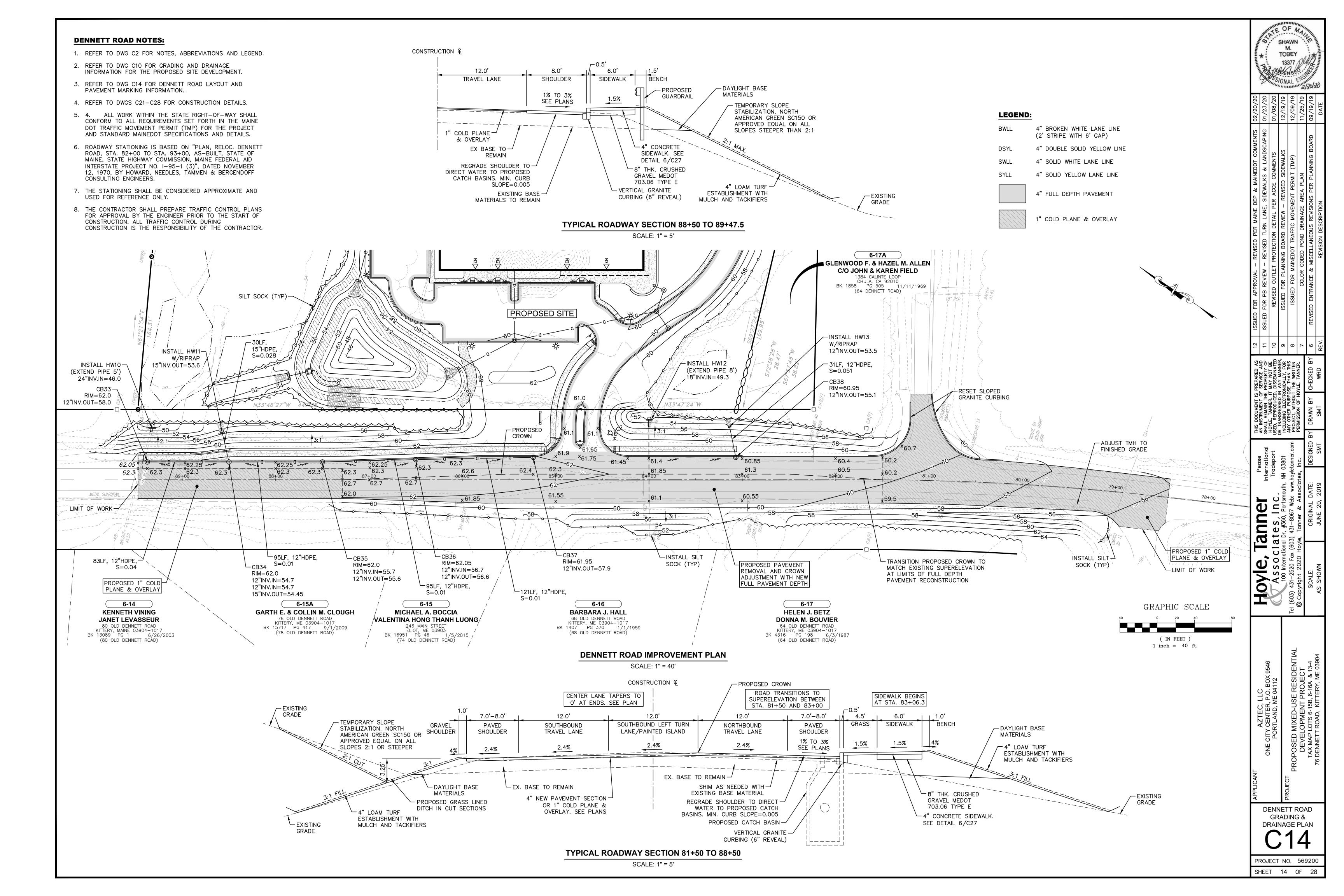
REGULATION	REQUIREMENT	PROVIDED
PERMANENT POOL VOLUME:	13,379 CF	18,313 CF
PERM. POOL AVERAGE DEPTH:	3.0 FT	3.09 FT
CHANNEL PROTECTION VOLUME:	6,689 CF	7,997 CF
LENGTH TO WIDTH RATIO	2:1	2:1
SEDIMENT FOREBAY 1 CAPACITY:	16 CF	45 CF
SEDIMENT FOREBAY 2 CAPACITY:	38 CF	70 CF
UNDERDRAIN LENGTH:	23 FT	30 FT











N71°38'33"E N71°38'33"E **UTILITY NOTES:** 6-CEM 163.49' 1. REFER TO DWG C2 FOR NOTES, ABBREVIATIONS AND LEGEND. N64°09'15"E 306.07 2. REFER TO DWGS C21-C28 FOR CONSTRUCTION DETAILS. N60°02'45"E 3. THE INTENT OF THIS PLAN IS TO SHOW THE GENERAL LOCATION OF 70.66 PROPOSED SITE UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH ALL PROPOSED UTILITY OWNERS ON INSTALLATION LOCATIONS AND UTILITY 6-14 SIZES PRIOR TO THE START OF ANY CONSTRUCTION. **KENNETH VINING JANET LEVASSEUR** 4. THE DOMESTIC WATER AND FIRE PROTECTION WATER LINE SIZES SHOWN 80 OLD DENNETT ROAD ON THESE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL REFER TO KITTERY, MAINE 03904-1017 13089 PG 1 6/26/2003 THE MEP PLANS FOR ALL WATER CONNECTIONS PIPE SIZES. (80 OLD DENNETT ROAD) WETLANDS BASED ON THE HYDRAULIC SYSTEM ANALYSIS PREPARED BY WRIGHT-PIERCE DATED NOVEMBER 25, 2019 AND COORDINATION WITH THE KITTERY WATER DISTRICT, EACH BUILDING SHALL HAVE INDIVIDUAL BOOSTER PUMPS FOR BOTH DOMESTIC AND FIRE SERVICES TO PROVIDE ADEQUATE WATER PRESSURE TO ALL FLOORS OF THE BUILDINGS. REFER TO FINAL MEP PLANS FOR ADDITIONAL DETAILS. THE BUILDING SEWER SERVICE PIPE SIZES SHOWN ON THESE PLANS ARE WETLANDS APPROXIMATE. THE CONTRACTOR SHALL REFER TO THE MEP PLANS FOR 250' VERNAL POOL ALL BUILDING SEWER SERVICE SIZES AND FOUNDATION PENETRATIONS. D CRITICAL TERRESTRIAL HABITAT BUFFER \ THE UNDERGROUND ELECTRICAL LINES, MANHOLES AND TRANSFORMERS \Box SHOWN ON THIS PLAN ARE APPROXIMATE LOCATIONS. THE CONTRACTOR - PROPOSED DRAINAGE SHALL COORDINATE THE ELECTRIC LAYOUT WITH CENTRAL MAINE POWER SHOWN FOR REFERENCE (CMP) PRIOR TO ANY INSTALLATION. ONLY. REFER TO C10 & C11 FOR DRAINAGE INFO (TYP) 8. THE CONTRACTOR SHALL COORDINATE THE SIZE AND NUMBER OF PIPES INSTALL ELECTRIC SERVICE FOR ALL ELECTRIC AND TELECOM DUCT BANKS WITH THE UTILITY OWNERS. CONNECTIONS TO ALL THE DUCTBANKS SHALL BE ENCASED IN CONCRETE IF REQUIRED BY THE GARAGE STRUCTURES (TYP) UTILITY OWNERS. 9. THE CONTRACTOR SHALL COORDINATE ALL GAS INSTALLATION WORK WITH 750' VERNAL POOL UNITIL. CRITICAL TERRESTRIAL HABITAT BUFFER ス 10. COORDINATE LIGHT POLE BASE LOCATIONS, CONDUIT ROUTING, CONDUIT 100' VERNAL POOL NO SIZE AND POWER SUPPLY WITH ELECTRICAL ENGINEER. 0 PROPOSED DISTURBANCE BUFFER WET POND 6-15A **FIRE PROTECTION NOTES:** GARTH E. & COLLIN M. CLOUGH D BUILDINGS 1, 2A, 2B AND 3 SHALL HAVE FULL FIRE SUPPRESSION 78 OLD DENNETT ROAD KITTERY, ME 03904-1017 BK 15717 PG 417 9/1/2009 SYSTEMS INCLUDING; NFPA 13 SPRINKLER SYSTEM, ALL FLOOR STANDPIPES INCLUDING STANDPIPE SERVICE TO ROOF AREAS, MONITORED (78 OLD DENNETT ROAD) FIRE ALARM SYSTEMS AND KNOX BOX SYSTEMS ON EACH BUILDING. 2. BUILDING 4 SHALL HAVE A NFPA 13 SYSTEM. THE BUILDING SHALL ALSO HAVE A MONITORED ALARM SYSTEM AND KNOX BOX SYSTEM INSTALLED. 3. ALL ALARM SYSTEMS SHALL HAVE A MAIN PANEL WITH REMOTE ANNUNCIATORS LOCATED PER THE DIRECTION OF THE FIRE CHIEF. CAP 12" SEWER 4. THE FINAL LOCATION OF THE FIRE DEPARTMENT CONNECTIONS SHALL BE FOR FUTURE LOCATED PER THE DIRECTION OF THE FIRE CHIEF. CONNECTION 6-15 /INV=52.1 5. DUE TO THE SIZE OF THE BUILDINGS, THE FIRE CHIEF MAY DIRECT THAT **MICHAEL A. BOCCIA** MORE THAN ONE KNOX BOX PER BUILDING BE INSTALLED. THESE MAY BE **VALENTINA HONG THANH LUONG** 45LF, 12"SDR35, LOCATED AT THE ENTRANCES WHERE REMOTE ANNUNCIATORS ARE 246 MAIN STREET S=0.0056 INSTALLED. A MASTER KEY FOR ALL DOORS SHALL BE PLACED IN THE ELIOT, ME 03903 BK 16951 PG 46 1 KNOX BOXES. PROPOSED -SMH8 1/5/2015 "NH-MA LEFT (74 OLD DENNETT ROÁD) SIGNIFICANT VERNAL POOL RIM=60.8 LIGHT POLE & FINAL PLANS MUST BE SUBMITTED TO THE MAINE FIRE MARSHAL'S OFFICE (POOL ID #2667) 6"INV.IN=54.3 BASE (TYP) FOR REVIEW AND APPROVAL 12"INV.IN=51.85 -CAP GAS 12"INV.OUT=51.75 (FUTURE 12" CAP-₹45LF, 6"SDR35, CONNECTION) (FUTURE S=0.027 CONNECTION) 6"INV.OUT=55.5 DOMESTIC -22.5° BEND -7 WATER EN Fanner lates, Inc. -45° BENDS W/SHUTOFF FIRE DEPARTMENT CONNECTION 6" FIRE W/ GATE VALVE COORDINATE FINAL LOCATION 12" GATE WITH KITTERY FIRE DEPARTMENT GAS-VALVE TELECOM — —210LF, 12"SDR35, 12"X12" ELECTRIC S=0.005TEE - TRANSFORMER 12"X6"-Oyle, COORDINATE WITH CMP ←GAS VALVE (TYP) 6-16 -242LF, 12"SDR35. -INSTALL HYDRANT BARBARA J. HALL W/6" GATE VALVE S=0.0052 RIM = 58.85∠22.5° BEND 68 OLD DENNETT ROAD KITTERY, ME 03904-1017 BK 1407 PG 370 1/1/1959 >12"X6" TEE 12"INV.IN=49.35 HEADWALL 12"INV.OUT=49.25 -(68 OLD DENNETT ROAD) 12" WATER 6" WATER ─ ✓ INSTALL GAS INSTALL HYDRANT-COORDINATE W/6" GATE VALVE WITH UNITIL WETLANDS PROPOSED UTILITY POLE &-OVERHEAD WIRE EXTENSION INSTALL UNDERGROUND -COORDINATE WITH CMP ELECTRIC AND TELECOM [∠]12"X6" IN SAME TRENCH TEE 22.5° BEND -PROPOSED 12" WATER MAIN CONNECTION TO RIM = 60.7〔12"WATER一 RANGER DRIVE. TO BE INSTALLED PER DESIGN \$69°27'24"W 12"INV.IN=50.7 PLANS BY KLEINFELDER DATED APRIL 2016 12"INV.OUT=50.6 `~ 169.95' ELECTRIC MANHOLE -LLC P.O. COORDINATE WITH CMP N09°38'15"W PROPOSED GAS MAIN-*S72°38'28"W* R625.00' N47°22'46"W 💭 33.27' EXTENSION. COORDINATE 28.47' 2.98' L132.24' WITH UNITIL S67°57'48"W 38.82' 6-17 HELEN J. BETZ **DONNA M. BOUVIER** 64 OLD DENNETT ROAD KITTERY, ME 03904-1017 BK 4316 PG 198 6/3/1987 6-17A C.H.B.[F] (64 OLD DENNETT ROAD) **GLENWOOD F. & HAZEL M. ALLEN** C/O JOHN & KAREN FIELD 1384 CALINTE LOOP CHULA, CA 92010 BK 1858 PG 505 11/11/1969 (64 DENNETT ROAD) SOUTHBOUND ON-RAMP C.B.[F]GRAPHIC SCALE

] *C.B.[F]*

SHAWN

TOBEY

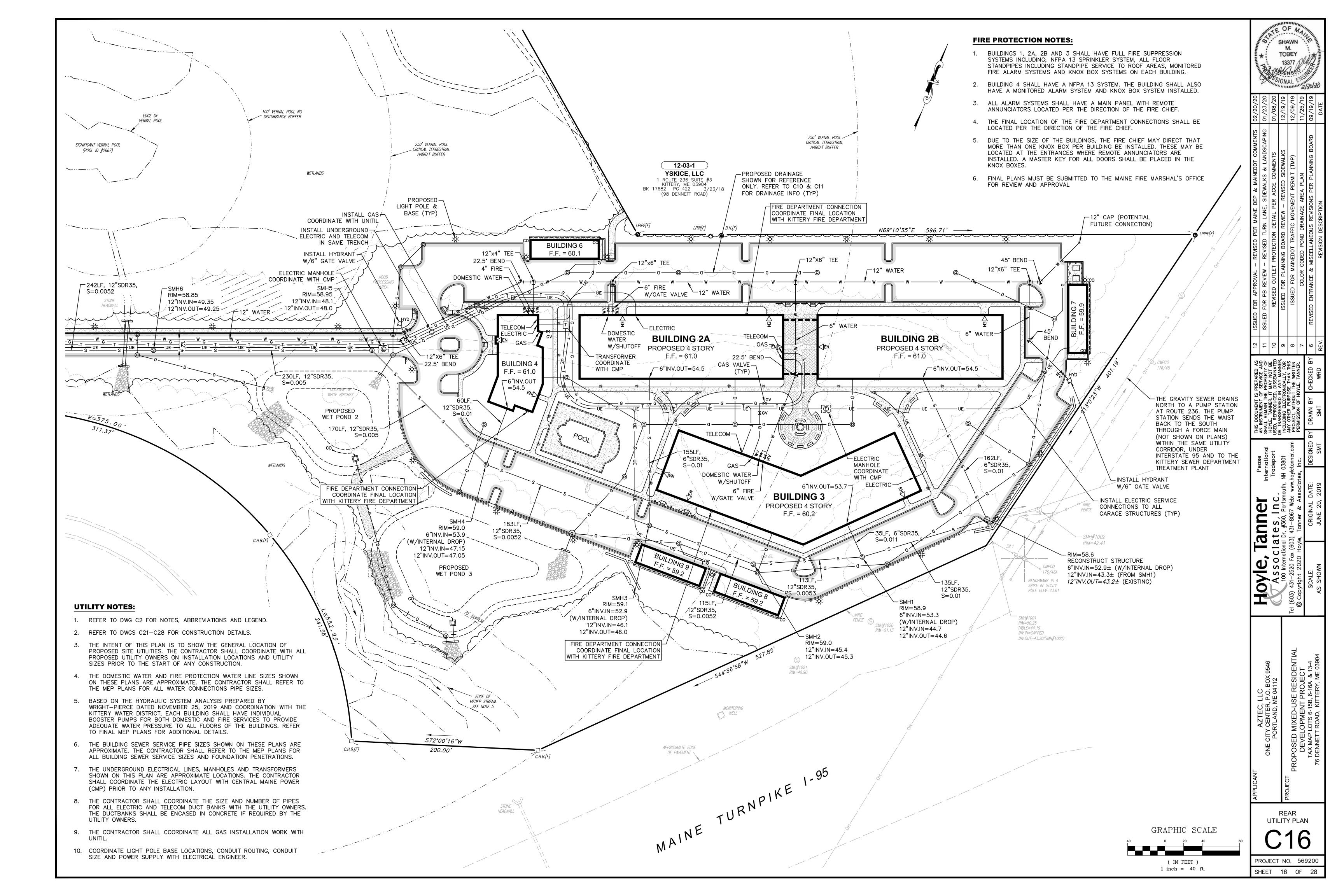
FRONT UTILITY PLAN

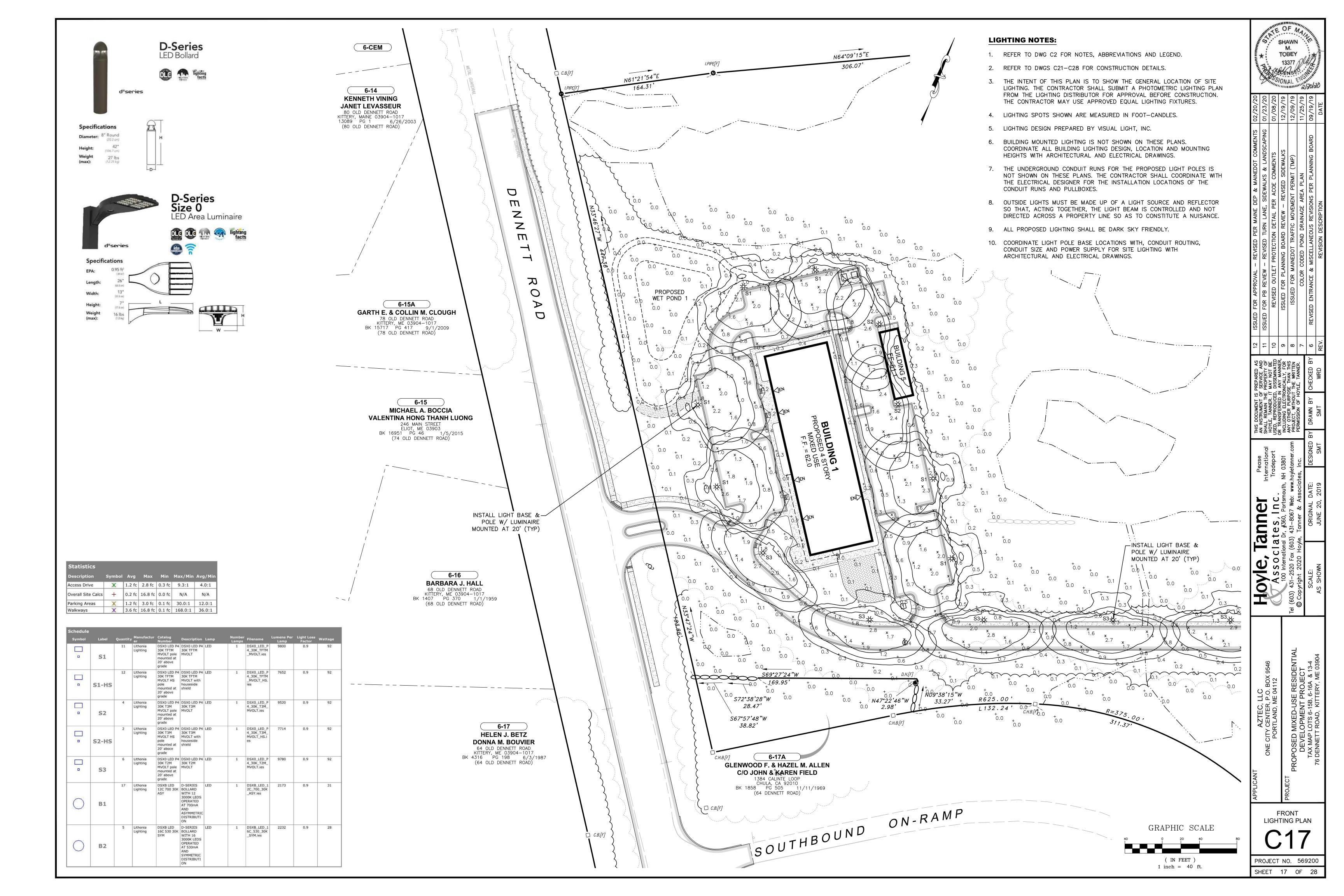
PROJECT NO. 569200

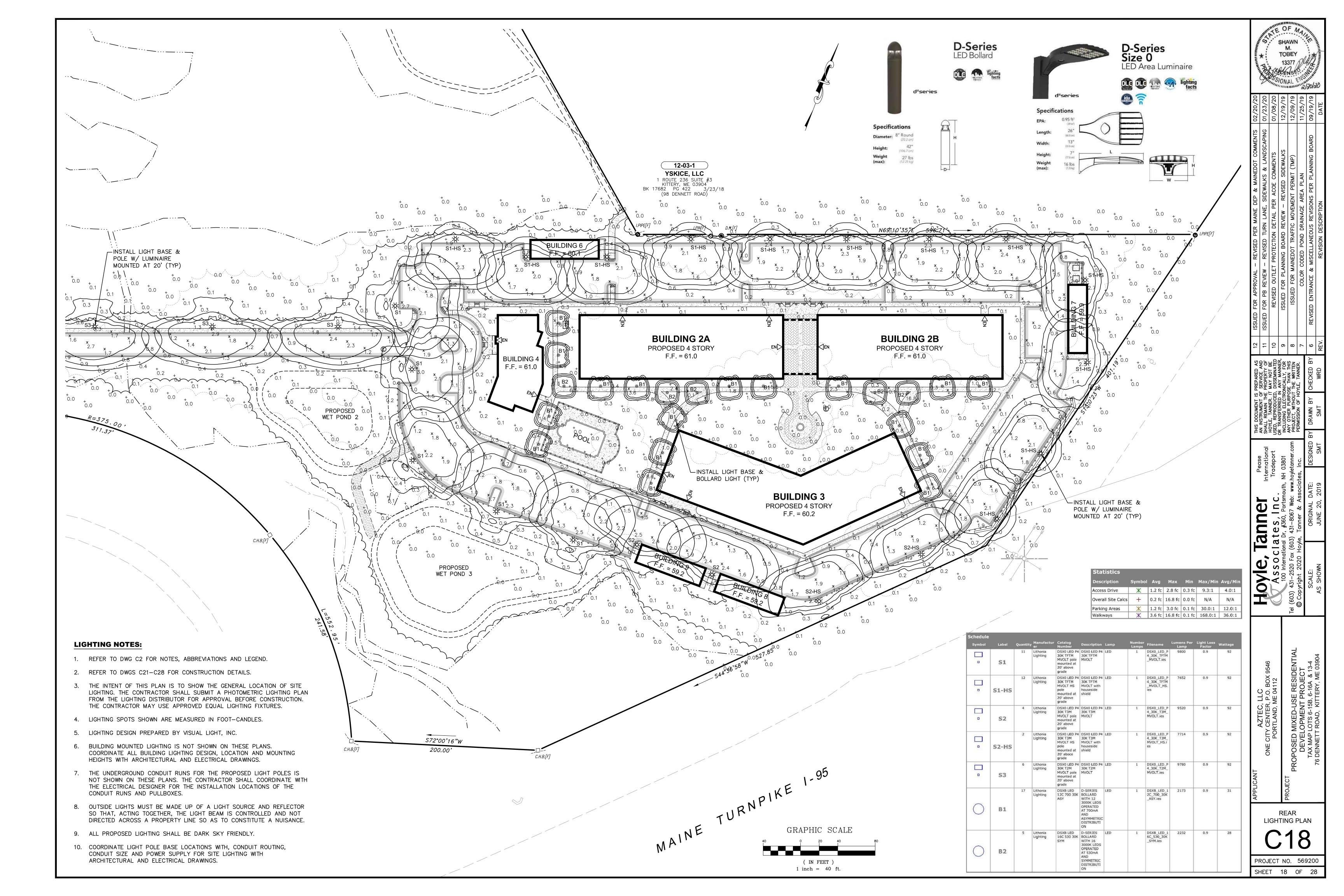
SHEET 15 OF 28

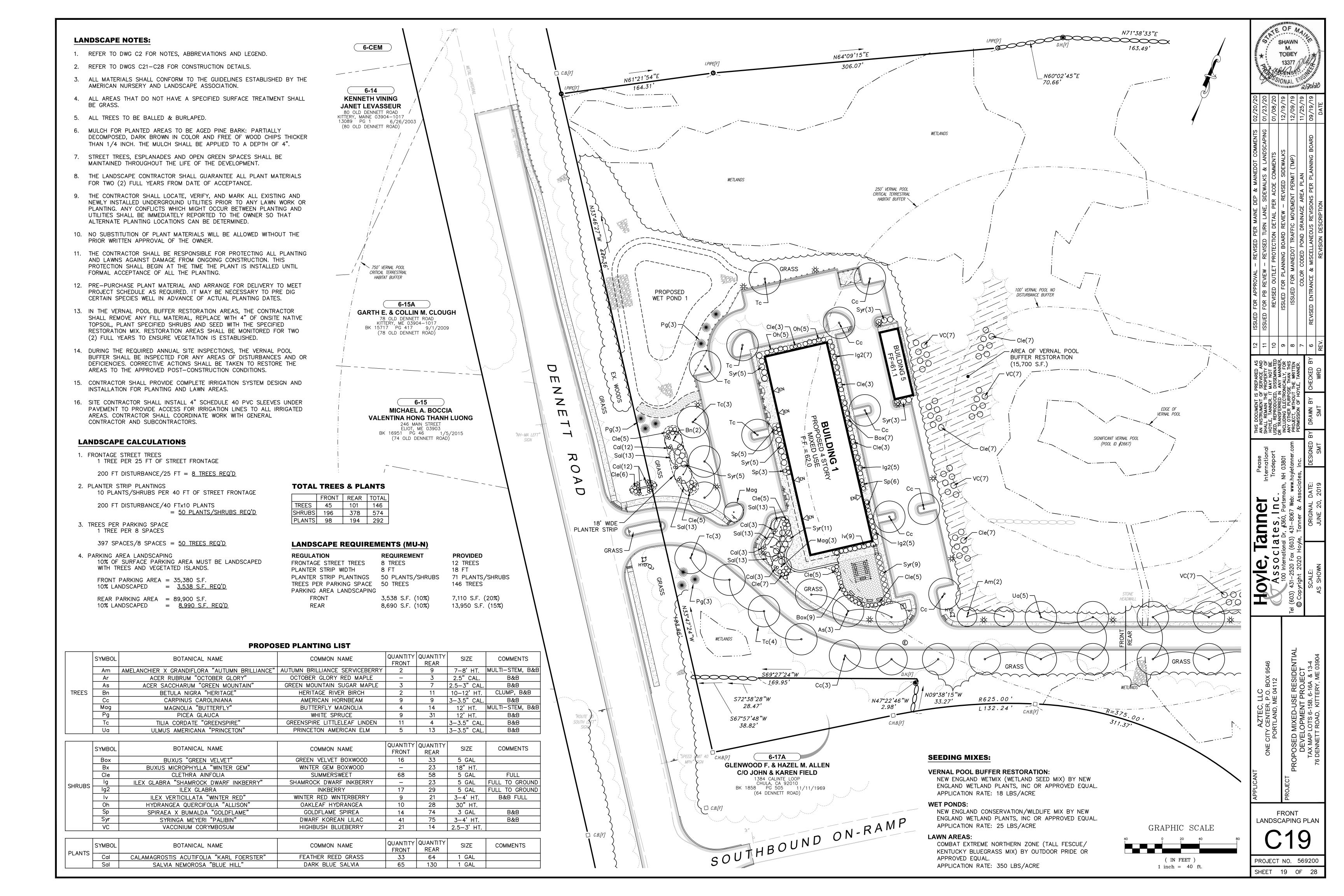
(IN FEET)

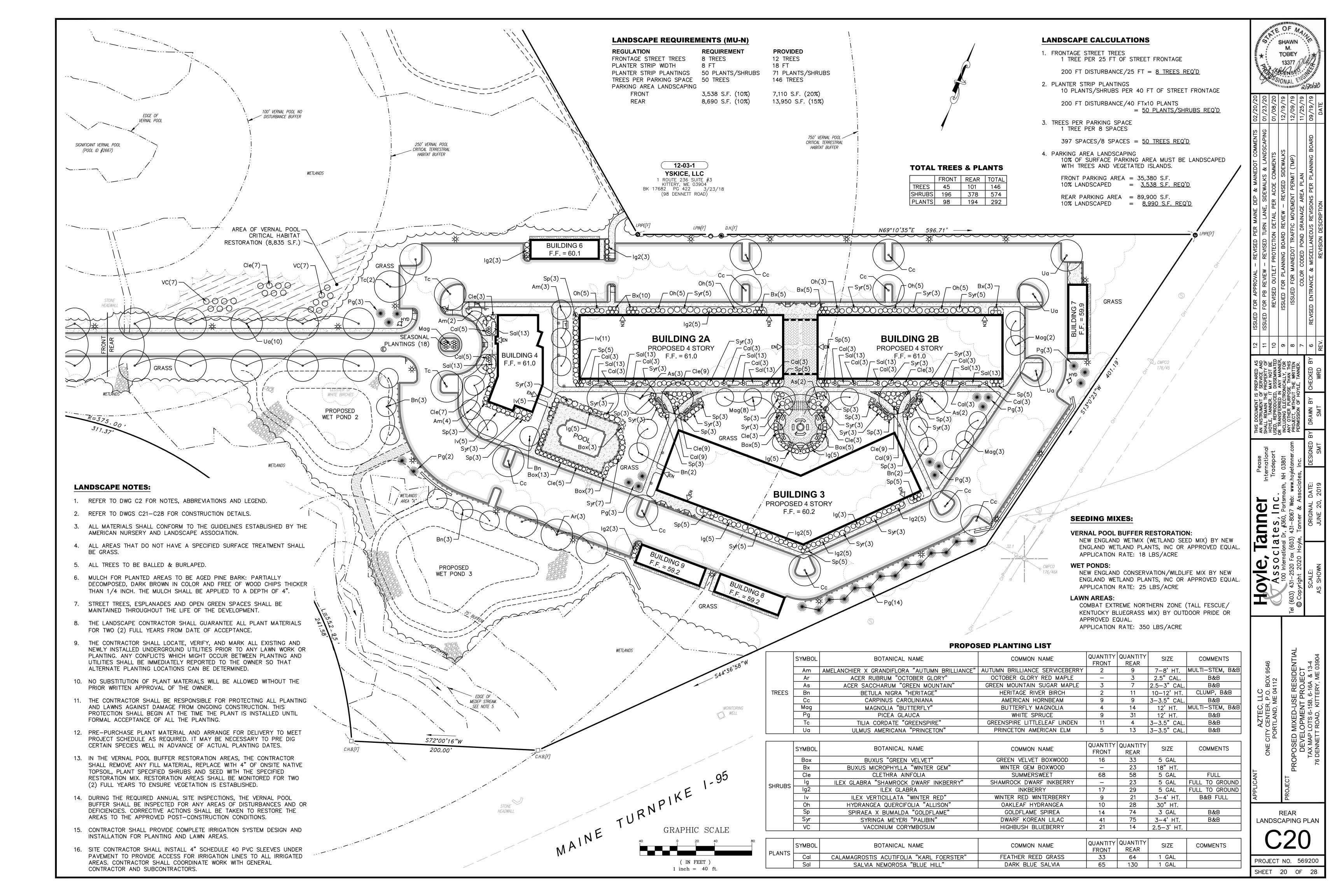
1 inch = 40 ft.







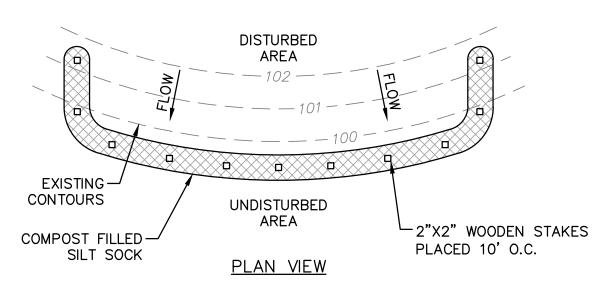


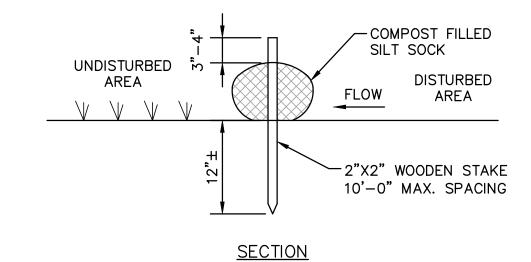


EROSION CONTROL NOTES:

- 1. POLLUTION PREVENTION. MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE. CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE SOIL EROSION. MINIMIZE THE DISTURBANCE OF STEEP SLOPES CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOW RATES AND VOLUME, TO MINIMIZE EROSION AT OUTLETS. THE DISCHARGE MAY NOT RESULT IN EROSION OF ANY OPEN DRAINAGE CHANNELS, SWALES, STREAM CHANNELS OR STREAM BANKS, UPLAND, OR COASTAL OR FRESHWATER WETLANDS OFF THE PROJECT SITE. WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FEET OF ANY PROTECTED NATURAL RESOURCE. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.
- 2. <u>SEDIMENT BARRIERS.</u> PRIOR TO CONSTRUCTION, PROPERLY INSTALL SEDIMENT BARRIERS AT THE DOWNGRADIENT EDGE OF ANY AREA TO BE DISTURBED AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE DISTURBED AREA. SEDIMENT BARRIERS SHOULD BE INSTALLED DOWNGRADIENT OF SOIL OR SEDIMENT STOCKPILES AND STORMWATER PREVENTED FROM RUNNING ONTO THE STOCKPILE. MAINTAIN THE SEDIMENT BARRIERS BY REMOVING ACCUMULATED SEDIMENT, OR REMOVING AND REPLACING THE BARRIER, UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED. WHERE A DISCHARGE TO A STORM DRAIN INLET OCCURS, IF THE STORM DRAIN CARRIES WATER DIRECTLY TO A SURFACE WATER AND YOU HAVE AUTHORITY TO ACCESS THE STORM DRAIN INLET, YOU MUST INSTALL AND MAINTAIN PROTECTION MEASURES THAT REMOVE SEDIMENT FROM THE DISCHARGE.
- 3. STABILIZED CONSTRUCTION ENTRANCE. PRIOR TO CONSTRUCTION, PROPERLY INSTALL A STABILIZED CONSTRUCTION ENTRANCE (SCE) AT ALL POINTS OF EGRESS FROM THE SITE. THE SCE IS A STABILIZED PAD OF AGGREGATE, UNDERLAIN BY A GEOTEXTILE FILTER FABRIC, USED TO PREVENT TRAFFIC FROM TRACKING MATERIAL AWAY FROM THE SITE ONTO PUBLIC ROWS. MAINTAIN THE SCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.
- 4. TEMPORARY STABILIZATION. WITHIN 7 DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES IN AN AREA THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS, STABILIZE ANY EXPOSED SOIL WITH MULCH, OR OTHER NON-ERODIBLE COVER. STABILIZE AREAS WITHIN 75 FEET OF A WETLAND OR WATERBODY WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.
- 5. REMOVAL OF TEMPORARY MEASURES. REMOVE ANY TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND STABILIZE.
- 6. <u>PERMANENT STABILIZATION.</u> IF THE AREA WILL NOT BE WORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO FINAL GRADE, THEN PERMANENTLY STABILIZE THE AREA WITHIN 7 DAYS BY PLANTING VEGETATION, SEEDING, SOD, OR THROUGH THE USE OF PERMANENT MULCH, OR RIP-RAP, OR ROAD SUB-BASE. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS; AMEND AREAS OF DISTURBED SUBSOILS WITH TOPSOIL, COMPOST, OR FERTILIZERS; PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY, EROSION CONTROL BLANKETS: AND SCHEDULE SODDING, PLANTING, AND SEEDING SO TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS. NEWLY SEEDED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL-ESTABLISHED WITH 90% COVER BY HEALTHY VEGETATION. IF NECESSARY, AREAS MUST BE REWORKED AND RESTABILIZED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT. ONE OR MORE OF THE FOLLOWING MAY APPLY TO A PARTICULAR SITE.
- 7. SEEDED AREAS, FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS A 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.
 - A. SODDED AREAS. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.
 - B. PERMANENT MULCH. FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.
 - C. RIP-RAP. FOR AREAS STABILIZED WITH RIP-RAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIP-RAP HAVE AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIP-RAP. STONE MUST BE SIZED APPROPRIATELY. IT IS RECOMMENDED THAT ANGULAR STONE BE USED.
 - D. AGRICULTURAL USE. FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP LAND), PERMANENT STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO AGRICULTURAL USE.
 - E. PAVED AREAS. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUB-BASE IS COMPLETED, PROVIDED IT IS FREE OF FINE MATERIALS THAT MAY RUNOFF WITH A RAIN EVENT
 - F. DITCHES, CHANNELS, AND SWALES. FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH A 90% COVER OF HEALTHY VEGETATION, WITH A WELL-GRADED RIP-RAP LINING, TURF REINFORCEMENT MAT, OR WITH ANOTHER NON-EROSIVE LINING SUCH AS CONCRETE OR ASPHALT PAVEMENT. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE CHANNEL LINING, UNDERCUTTING OF THE CHANNEL BANKS, OR DOWN-CUTTING OF THE CHANNEL.

- 8. WINTER CONSTRUCTION. "WINTER CONSTRUCTION" IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 15. IF DISTURBED AREAS ARE NOT STABILIZED WITH PERMANENT MEASURES BY NOVEMBER 1 OR NEW SOIL DISTURBANCE OCCURS AFTER NOVEMBER 1, BUT BEFORE APRIL 15, THEN THESE AREAS MUST BE PROTECTED AND RUNOFF FROM THEM MUST BE CONTROLLED BY ADDITIONAL MEASURES AND RESTRICTIONS.
 - A. SITE STABILIZATION. FOR WINTER STABILIZATION, HAY MULCH IS APPLIED AT TWICE THE STANDARD TEMPORARY STABILIZATION RATE. AT THE END OF EACH CONSTRUCTION DAY, AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE STABILIZED. MULCH MAY NOT BE SPREAD ON TOP OF SNOW.
 - B. SEDIMENT BARRIERS. ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS.
 - C. DITCH. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1. OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE DEPARTMENT.
 - D. SLOPES. MULCH NETTING MUST BE USED TO ANCHOR MULCH ON ALL SLOPES GREATER THAN 8% UNLESS EROSION CONTROL BLANKETS OR EROSION CONTROL MIX IS BEING USED ON THESE
- 9. STORMWATER CHANNELS. DITCHES, SWALES, AND OTHER OPEN STORMWATER CHANNELS MUST BE DESIGNED, CONSTRUCTED, AND STABILIZED USING MEASURES THAT ACHIEVE LONG-TERM EROSION CONTROL. DITCHES, SWALES AND OTHER OPEN STORMWATER CHANNELS MUST BE SIZED TO HANDLE, AT A MINIMUM, THE EXPECTED VOLUME RUN-OFF. EACH CHANNEL SHOULD BE CONSTRUCTED IN SECTIONS SO THAT THE SECTION'S GRADING, SHAPING, AND INSTALLATION OF THE PERMANENT LINING CAN BE COMPLETED THE SAME DAY. IF A CHANNEL'S FINAL GRADING OR LINING INSTALLATION MUST BE DELAYED, THEN DIVERSION BERMS MUST BE USED TO DIVERT STORMWATER AWAY FROM THE CHANNEL, PROPERLY-SPACED CHECK DAMS MUST BE INSTALLED IN THE CHANNEL TO SLOW THE WATER VELOCITY, AND A TEMPORARY LINING INSTALLED ALONG THE CHANNEL TO PREVENT SCOURING. PERMANENT STABILIZATION FOR CHANNELS IS ADDRESSED UNDER APPENDIX A(5)(G) ABOVE.
 - A. THE CHANNEL SHOULD RECEIVE ADEQUATE ROUTINE MAINTENANCE TO MAINTAIN CAPACITY AND PREVENT OR CORRECT ANY EROSION OF THE CHANNEL'S BOTTOM OR SIDE SLOPES.
 - B. WHEN THE WATERSHED DRAINING TO A DITCH OR SWALE IS LESS THAN 1 ACRE OF TOTAL DRAINAGE AND LESS THAN 1/4 ACRE OF IMPERVIOUS AREA, DIVERSION OF RUNOFF TO ADJACENT WOODED OR OTHERWISE VEGETATED BUFFER AREAS IS ENCOURAGED WHERE THE OPPORTUNITY EXISTS.
- 10. <u>SEDIMENT BASINS.</u> SEDIMENT BASINS MUST BE DESIGNED TO PROVIDE STORAGE FOR EITHER THE CALCULATED RUNOFF FROM A 2-YEAR, 24-HOUR STORM OR PROVIDE FOR 3,600 CUBIC FEET OF CAPACITY PER ACRE DRAINING TO THE BASIN. OUTLET STRUCTURES MUST DISCHARGE WATER FROM THE SURFACE OF THE BASIN WHENEVER POSSIBLE. EROSION CONTROLS AND VELOCITY DISSIPATION DEVICES MUST BE USED IF THE DISCHARGING WATERS ARE LIKELY TO CREATE EROSION. ACCUMULATED SEDIMENT MUST BE REMOVED AS NEEDED FROM THE BASIN TO MAINTAIN AT LEAST 1/2 OF THE DESIGN CAPACITY OF THE BASIN. THE USE OF CATIONIC TREATMENT CHEMICALS, SUCH AS POLYMERS, FLOCCULANTS, OR OTHER CHEMICALS THAT CONTAIN AN OVERALL POSITIVE CHARGE DESIGNED TO REDUCE TURBIDITY IN STORMWATER MUST RECEIVE PRIOR APPROVAL FROM THE DEPARTMENT. WHEN REQUESTING APPROVAL TO USE CATIONIC TREATMENT CHEMICALS, YOU MUST DESCRIBE APPROPRIATE CONTROLS AND IMPLEMENTATION PROCEDURES TO ENSURE THE USE WILL NOT LEAD TO A VIOLATION OF WATER QUALITY STANDARDS. IN ADDITION. YOU MUST SPECIFY THE TYPE(S) OF SOIL LIKELY TO BE TREATED ON THE SITE, CHEMICALS TO BE USED AND HOW THEY ARE TO BE APPLIED AND IN WHAT QUANTITY, ANY MANUFACTURER'S RECOMMENDATIONS, AND ANY TRAINING HAD BY PERSONNEL WHO WILL HANDLE AND APPLY THE CHEMICALS.
- 11. ROADS. GRAVEL AND PAVED ROADS MUST BE DESIGNED AND CONSTRUCTED WITH CROWNS OR OTHER MEASURES, SUCH AS WATER BARS, TO ENSURE THAT STORMWATER IS DELIVERED IMMEDIATELY TO ADJACENT STABLE DITCHES, VEGETATED BUFFER AREAS, CATCH BASIN INLETS, OR STREET GUTTERS.
- 12. CULVERTS. CULVERTS MUST BE SIZED TO AVOID UNINTENDED FLOODING OF UPSTREAM AREAS OR FREQUENT OVERTOPPING OF ROADWAYS. CULVERT INLETS MUST BE PROTECTED WITH APPROPRIATE MATERIALS FOR THE EXPECTED ENTRANCE VELOCITY, AND PROTECTION MUST EXTEND AT LEAST AS HIGH AS THE EXPECTED MAXIMUM ELEVATION OF STORAGE BEHIND THE CULVERT. CULVERT OUTLET DESIGN MUST INCORPORATE MEASURES, SUCH AS APRONS, TO PREVENT SCOUR OF THE STREAM CHANNEL. OUTLET PROTECTION MEASURES MUST BE DESIGNED TO STAY WITHIN THE CHANNEL LIMITS. THE DESIGN MUST TAKE ACCOUNT OF TAILWATER DEPTH.
- 13. PARKING AREAS. PARKING AREAS MUST BE CONSTRUCTED TO ENSURE RUNOFF IS DELIVERED TO ADJACENT SWALES, CATCH BASINS, CURB GUTTERS, OR BUFFER AREAS WITHOUT ERODING AREAS DOWNSLOPE. THE PARKING AREA'S SUB-BASE COMPACTION AND GRADING MUST BE DONE TO ENSURE RUNOFF IS EVENLY DISTRIBUTED TO ADJACENT BUFFERS OR SIDE SLOPES. CATCH BASINS MUST BE LOCATED AND SET TO PROVIDE ENOUGH STORAGE DEPTH AT THE INLET TO ALLOW INFLOW OF PEAK RUNOFF RATES WITHOUT BY-PASS OF RUNOFF TO OTHER AREAS.
- 14. ADDITIONAL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.





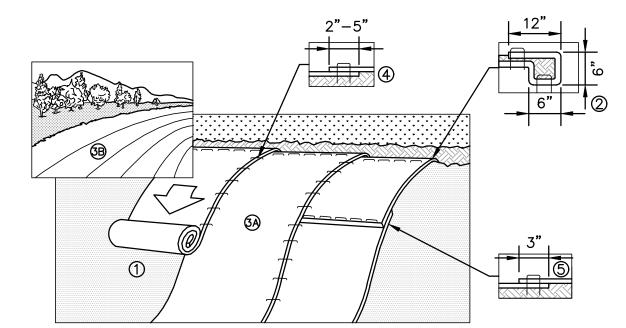
SILT SOCK NOTES:

- 1. SILT SOCK SHALL BE INSTALLED BEFORE ANY EARTH REMOVAL OR EXCAVATION TAKES PLACE.
- 2. INSTALL SILT SOCK AROUND ALL MATERIAL STOCKPILES.
- 3. MAINTENANCE SHALL BE PERFORMED AS NEEDED, AND THE MATERIAL REMOVED WHEN "BULGES" DEVELOP. DO NOT DEPOSIT THE MATERIAL NEAR WETLANDS OR WATERCOURSES.



SILT SOCK EROSION CONTROL DETAIL

SCALE: NONE



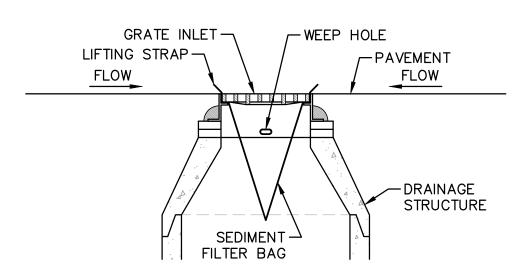
SLOPE PROTECTION INSTALLATION NOTES:

- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- 5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA. APPROXIMATELY 12"APART ACROSS ENTIRE BLANKET WIDTH.
- 6. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
- 7. INSTALL PRODUCT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.



SLOPE PROTECTION EROSION CONTROL MATTING DETAIL

SCALE: NONE



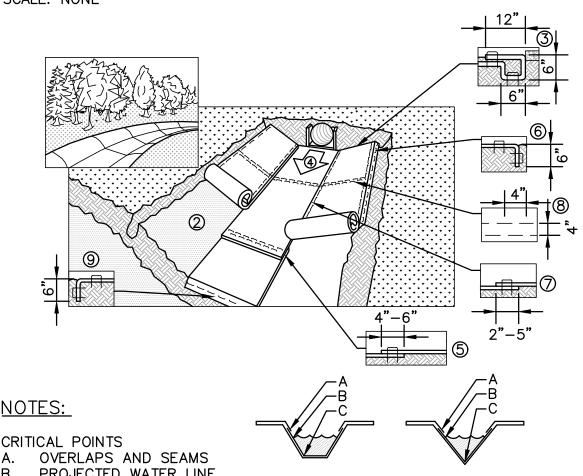
INLET PROTECTION NOTES:

- 1. THE SEDIMENT FILTER BAG SHALL BE DESIGNED FOR CATCH BASIN INLET PROTECTION. FILTER FABRIC IS NOT AN ACCEPTABLE SEDIMENT FILTER BAG.
- 2. REMOVE DRAINAGE INLET GRATE AND PLACE SEDIMENT FILTER BAG AROUND THE FRAME, REPLACE GRATE AND SEDIMENT FILTER BAG IN POSITION OR FOLLOW MANUFACTURER'S RECOMMENDATIONS. LIFTING STRAPS SHALL BE EXPOSED AND READY FOR MAINTENANCE PROCEDURES.
- INSPECT SEDIMENT FILTER BAG WEEKLY AND AFTER EVERY RAINFALL EVENT.
- 4. REPLACE, CLEAN OR REMOVE SEDIMENT FILTER BAG AS DIRECTED.



INLET PROTECTION DETAIL

SCALE: NONE



CRITICAL POINTS

PROJECTED WATER LINE C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

- ** HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.
- ** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS

CHANNEL INSTALLATION NOTES:

- 1. INSTALL PRODUCT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS
- 2. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED, DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH THE PAPER SIDE DOWN.
- 3. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
- 4. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- 5. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4"(10") ON CENTER TO SECURE BLANKETS.
- 6. FULL-LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6"DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- 7. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (DEPENDING ON BLANKET TYPE) AND STAPLED TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE BLANKET BEING OVERLAPPED.
- 8. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30' TO 40' INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF CHANNEL.
- 9. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.



CHANNEL EROSION CONTROL MATTING DETAIL

SCALE: NONE

ARED AS VICE AND PERTY OF NOT BE SEMINATED X MAY FOR THIS WRITTEN THIS WRITTEN TANNER. ates So OY As LLC P.O. 他 04

CONSTRUCTION

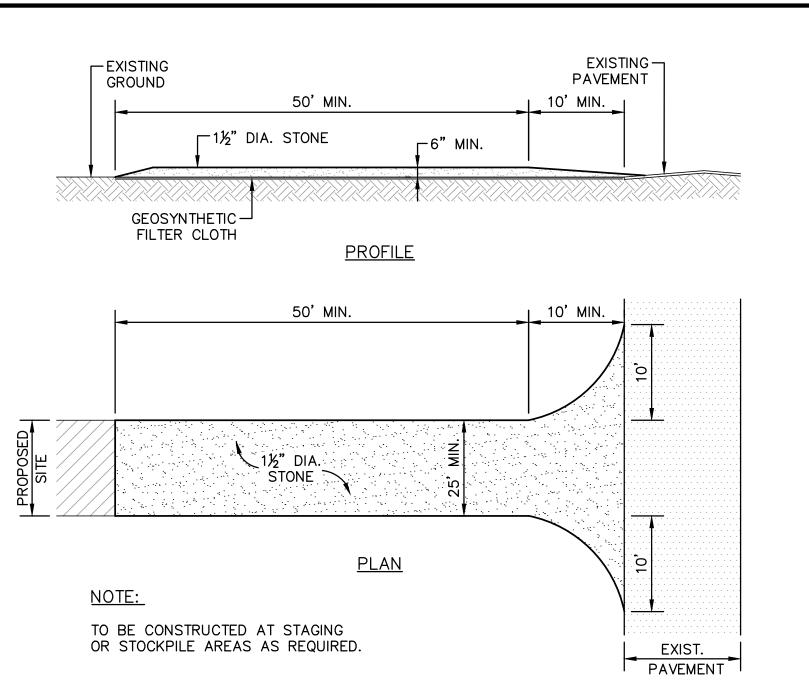
DETAILS 1

PROJECT NO. 569200

SHEET 21 OF 28

SHAWN

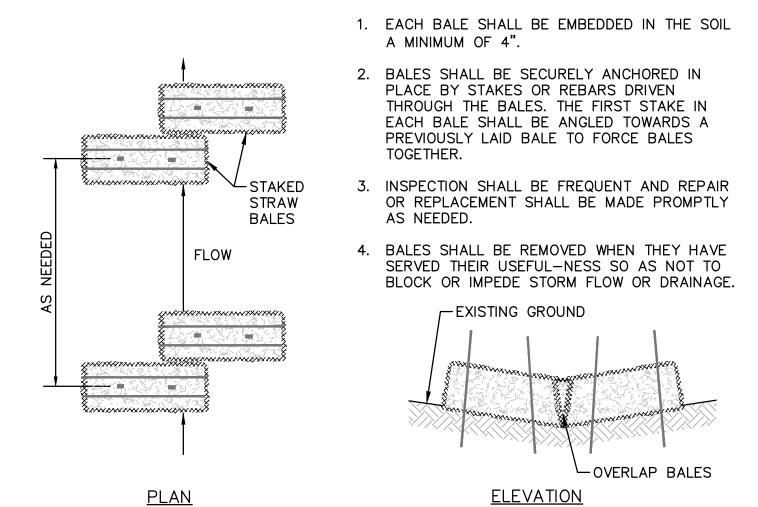
TOBEY



STRAW BALE CHECK DAM NOTES:

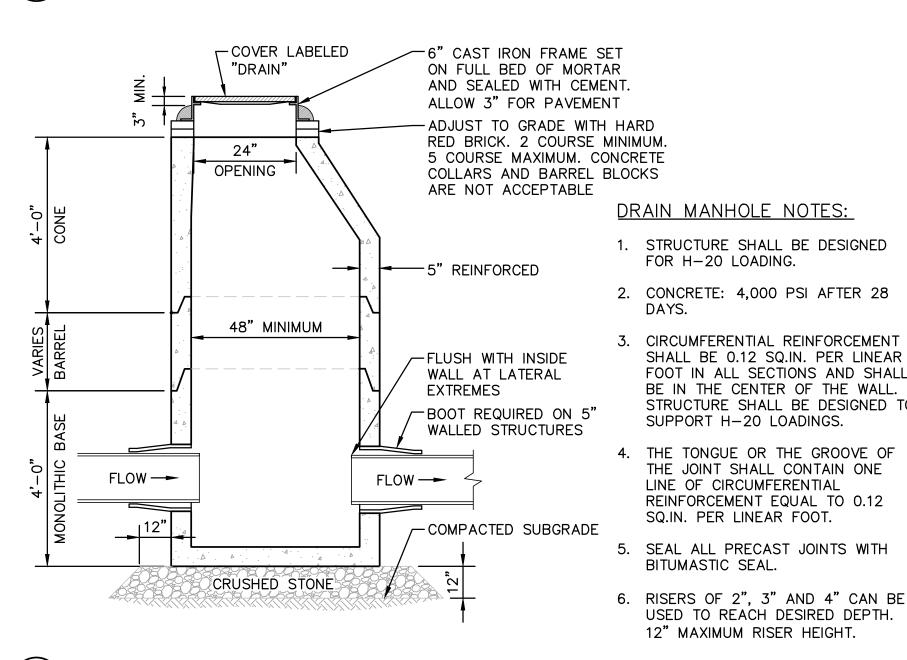
STABILIZED CONSTRUCTION ENTRY DETAIL

SCALE: NONE



STRAW BALE CHECK DAM DETAIL (AS NEEDED)

SCALE: NONE



DRAIN MANHOLE DETAIL

SCALE: NONE

DRAINAGE WAY PROFILE 1. THE CONTRACTOR SHALL USE STONE CHECK DAMS AS NEEDED FOR TEMPORARY EROSION CONTROL L = THE DISTANCE SUCH THAT THE

DURING CONSTRUCTION. 2. REMOVE CHECK DAMS AFTER SITE

CENTER OF STONE

CHECK DAMS SHALL BE

MIN. 6" BELOW SIDES

CHECK DAM SPACING

ELEV. A = ELEV. B.

DRAINAGE WAY SECTION

2"-3"ø CLEAN

WASHED STONE

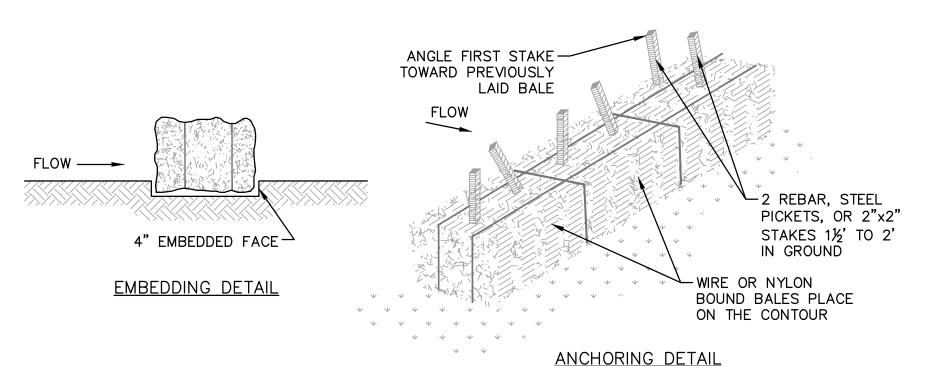
-MIRAFI 140N OR EQUAL

IS STABILIZED.

NOTES:

STONE CHECK DAM DETAIL (AS NEEDED)

SCALE: NONE

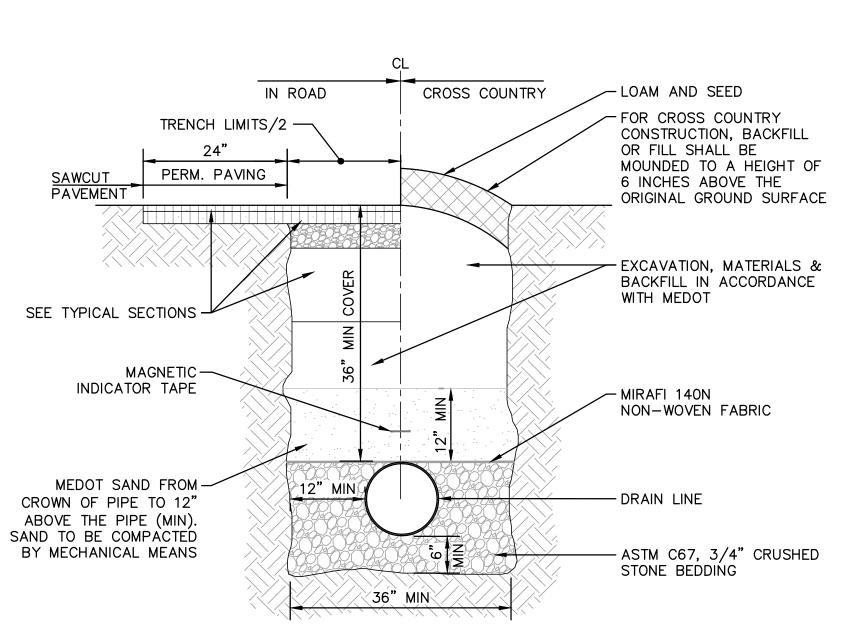


STRAW BALE NOTES:

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

STRAW BALE DETAIL (AS NEEDED)

SCALE: NONE



SHALL BE 0.12 SQ.IN. PER LINEAR FOOT IN ALL SECTIONS AND SHALL

BE IN THE CENTER OF THE WALL.

THE JOINT SHALL CONTAIN ONE

REINFORCEMENT EQUAL TO 0.12

SUPPORT H-20 LOADINGS.

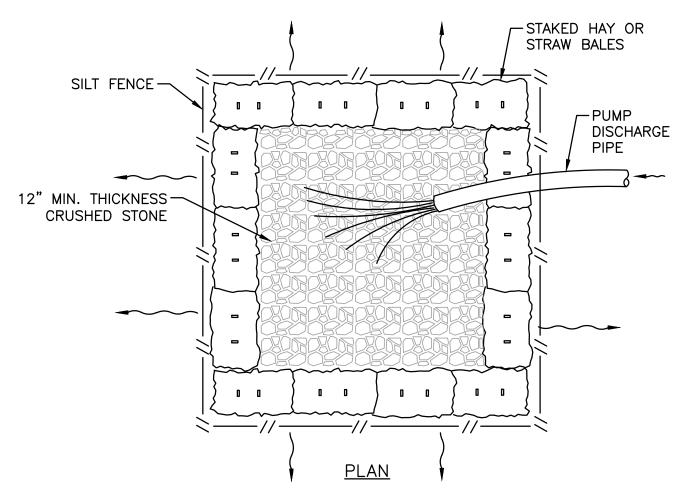
LINE OF CIRCUMFERENTIAL

SQ.IN. PER LINEAR FOOT.

STRUCTURE SHALL BE DESIGNED TO

DRAIN TRENCH DETAIL

SCALE: NONE

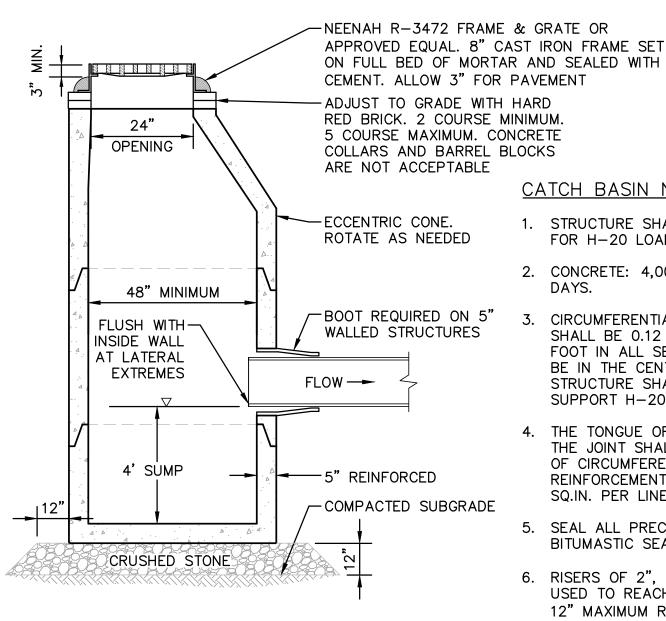


DEWATERING PIT NOTES:

- 1. ADJUST SIZE OF PIT TO MAINTAIN CLEAN NON-EROSIVE WATER DISCHARGE FROM PIT.
- 2. TO BE CONSTRUCTED AT APPROVED UPLAND LOCATIONS.
- 3. TO BE USED FOR PUMPING OPERATIONS DURING DEWATERING,



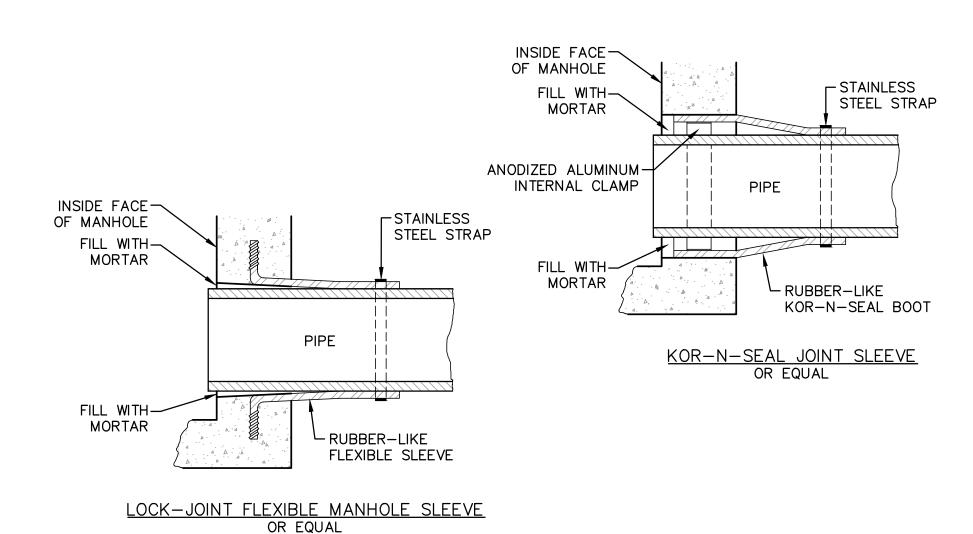
DEWATERING PIT DETAIL



CATCH BASIN NOTES:

1. STRUCTURE SHALL BE DESIGNED

- FOR H-20 LOADING. 2. CONCRETE: 4,000 PSI AFTER 28
- DAYS.
- . CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE IN THE CENTER OF THE WALL. STRUCTURE SHALL BE DESIGNED TO SUPPORT H-20 LOADINGS.
- 4. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ.IN. PER LINEAR FOOT.
- 5. SEAL ALL PRECAST JOINTS WITH BITUMASTIC SEAL.
- 6. RISERS OF 2", 3" AND 4" CAN BE USED TO REACH DESIRED DEPTH. 12" MAXIMUM RISER HEIGHT.





SCALE: NONE

TYPICAL CATCH BASIN DETAIL

SCALE: NONE

Fannel So Hoyl LLC P.O. CONSTRUCTION **DETAILS 2**

PREPARED AS
SERVICE AND
PROPERTY OF
MAY NOT BE
DISSEMINATED
ANY MANNER,
DNICALLY, FOR
SE THAN THIS
THE WRITTEN

SHAWN

TOBEY

SHEET 22 OF 28

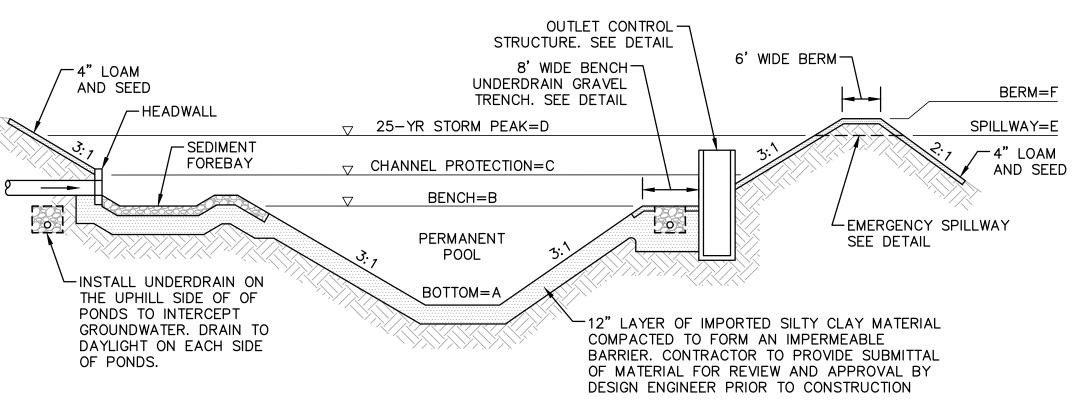
PROJECT NO. 569200

WET POND MAINTENANCE NOTES:

- 1. EMBANKMENTS SHOULD BE INSPECTED AT LEAST ANNUALLY BY A QUALIFIED PROFESSIONAL FOR SETTLEMENT, EROSION, SEEPAGE, ANIMAL BURROWS, WOODY VEGETATION, AND OTHER CONDITIONS THAT COULD DEGRADE THE EMBANKMENT AND REDUCE ITS STABILITY FOR IMPOUNDING WATER. IMMEDIATE CORRECTIVE ACTION SHOULD BE IMPLEMENTED IF ANY SUCH CONDITIONS ARE FOUND.
- 2. INLET AND OUTLET PIPES, INLET AND OUTLET STRUCTURES, ENERGY DISSIPATION STRUCTURES OR PRACTICES, AND OTHER STRUCTURAL APPURTENANCES SHOULD BE INSPECTED AT LEAST ANNUALLY BY A QUALIFIED PROFESSIONAL, AND CORRECTIVE ACTION IMPLEMENTED AS INDICATED BY SUCH INSPECTION.
- 3. TRASH AND DEBRIS SHOULD BE REMOVED FROM THE BASIN AND ANY INLET OR OUTLET STRUCTURE WHENEVER OBSERVED BY INSPECTION.
- 4. ACCUMULATED SEDIMENT SHOULD BE REMOVED WHEN IT SIGNIFICANTLY AFFECTS BASIN CAPACITY.
- 5. A MINIMUM SEPARATION OF ONE (1) FOOT IS RECOMMENDED FROM THE BOTTOM OF THE BASIN TO THE TOP OF BEDROCK, OR AN IMPERMEABLE BARRIER (CLAY LAYER OR SYNTHETIC LINER) SHOULD BE PROVIDED.

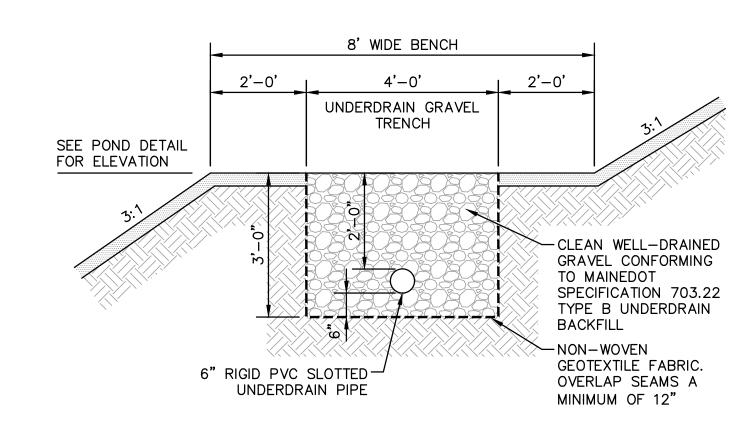
WET POND CROSS SECTION

SCALE: NONE



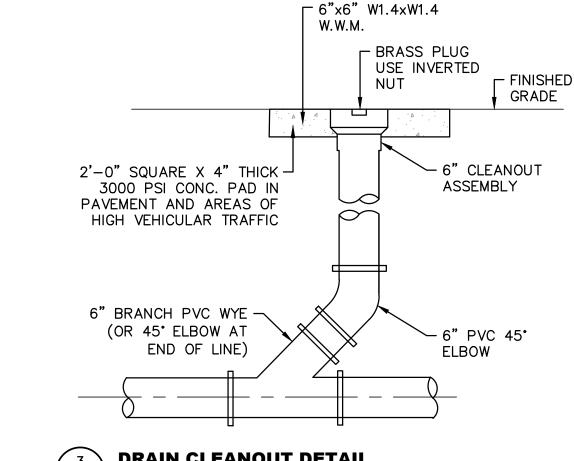
TYPICAL SECTION

WET POND	BOTTOM ELEV. A	BENCH ELEV. B	PERMANENT POOL VOLUME	CHANNEL PROTECTION ELEV. C	CHANNEL PROTECTION VOLUME	25-YR STORM PEAK ELEV. D	SPILLWAY ELEV. E	BERM ELEV. F
1	46.0	53.3	18,313 C.F.	54.4	8,023 C.F.	55.83	55.85	57.1
2	45.0	52.5	12,916 C.F.	53.3	5,590 C.F.	54.84	54.85	56.0
3	44.0	49.5	29,209 C.F.	50.6	13,516 C.F.	52.43	52.43	53.75



UNDERDRAIN GRAVEL TRENCH DETAIL

SCALE: NONE



DRAIN CLEANOUT DETAIL

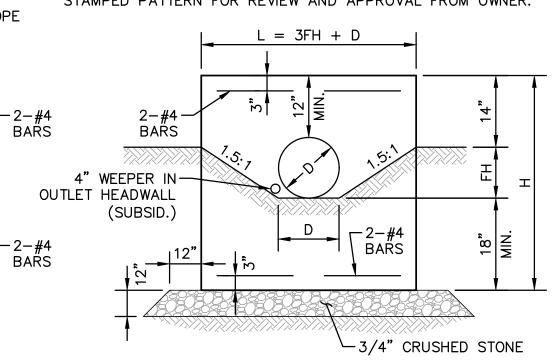
SCALE: NONE

BALLAST FOOTING-

-SLOPE VARIES -SLOPE VARIES (2:1, 3:1 OR 4:1) (2:1, 3:1 OR 4:1) -ROUND SLOPE -ROUND SLOPE CONCRETE -CLASS A MORTAR RUBBLE

CONCRETE SECTION ON CENTERLINE

HEAWALLS 1-3, 6 AND 7 SHALL BE MORTAR RUBBLE OR STONE PATTERN STAMPED CONCRETE HEADWALLS. PROVIDE STAMPED PATTERN FOR REVIEW AND APPROVAL FROM OWNER.



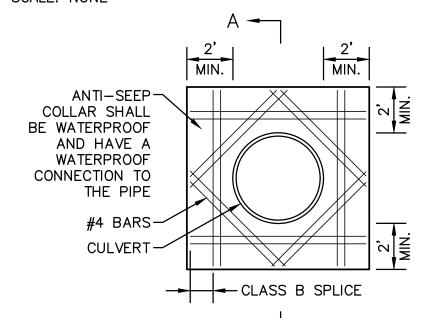
ELEVATION VIEW

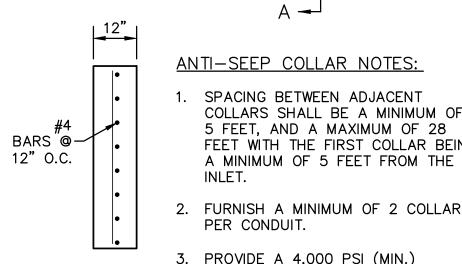
DIAMETER D INCHES	MASONRY PER FOOT OF WALL CU. YD	MASONRY PER STANDARD HEADER CU. YD	STEEL PER STANDARD HEADER LB.	LENGTH OF BARS	EXC. FOR 1' DEPTH CU. YD.	HEADER LENGTH L	HEADER HEIGHT H	FILL HEGHT FH	WIDTH AT BOTTOM OF HEADER W
12	0.186	0.61	9	3'-2"	0.789	3'-6"	3'-6"	0'-10"	0'-10½"
15	0.202	0.85	11	3–10	0.947	4-6	3–9	1-1	1-111/4
18	0.222	1.13	14	5-2	1.111	5-6	4-0	1-4	2-0
24	0.260	1.78	20	7–2	1.451	7–6	4-6	1–10	2-11/2
30	0.301	2.58	25	9-2	1.810	9-6	5-0	2-4	2-3
36	0.344	3.53	31	11-2	2.187	11-6	5-6	2-10	2-41/2

NOTE:

CONCRETE OR MORTAR RUBBLE HEADWALL DETAILS

SCALE: NONE





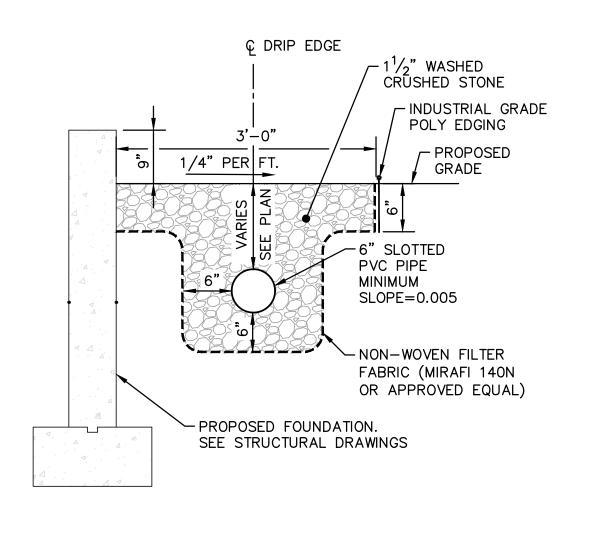
SCALE: NONE

ANTI-SEEP COLLAR NOTES: SPACING BETWEEN ADJACENT COLLARS SHALL BE A MINIMUM OF 5 FEET, AND A MAXIMUM OF 28 FEET WITH THE FIRST COLLAR BEING

. FURNISH A MINIMUM OF 2 COLLARS PER CONDUIT.

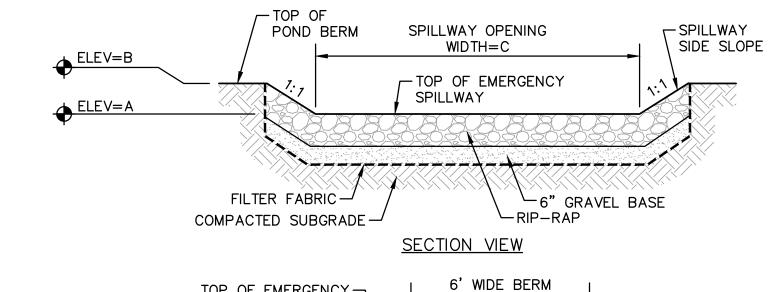
3. PROVIDE A 4,000 PSI (MIN.) CONCRETE MIX.

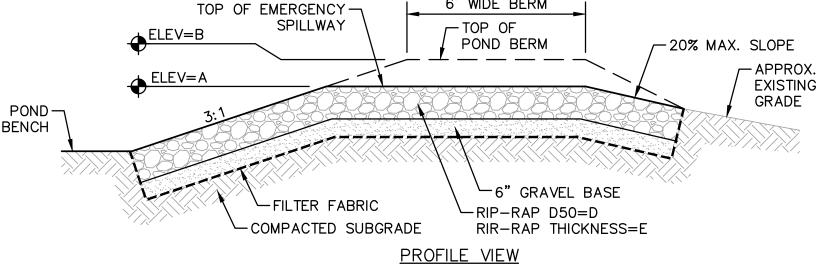
ANTI-SEEP DRAIN COLLAR DETAIL



TYPICAL DRIP EDGE INFILTRATION DETAIL

SCALE: NONE





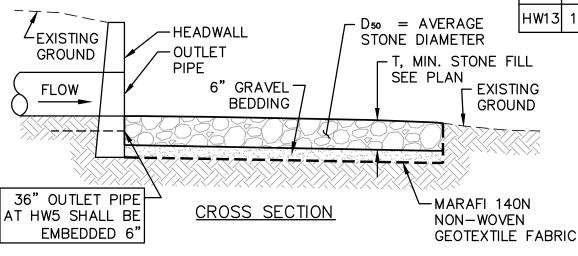
PROFILE VIEW								
WET POND	SPILLWAY ELEV. A	BERM ELEV. B	SPILLWAY WIDTH FT C	RIP-RAP D50 D	RIP-RAP THICKNESS E			
1	55.85	57.1	30	6"	12"			
2	54.85	56.0	30	6"	12"			
3	52.45	53.75	55	8"	16"			

EMERGENCY SPILLWAY DETAIL

SCALE: NONE

HEADWALL —

, I									
			D	W1	Г	W2	Т	D 50	RIP-RAI
			(IN)	(FT)	(FT)	(FT)	(IN)	(IN)	
	Н	HW1	18	4.5	17	11	12	6	4.8
	Н	HW2	18	4.5	14	10	12	6	3.8
FLOW		HW3	24	6	16	12	12	6	5.6
RIP-RAP	W H	HW5	36	0	27	20	12	6	14.7
	Н	HW6	12	3	10	7	12	6	1.7
	Н	HW7	18	4.5	16	11	12	6	4.5
	Н	HW8	36	9	28	20	12	6	15.2
PLAN VIEW	I <u> </u> н	1W9 2	24/36	15	22	24	12	6	16.2
I CONT TILT	Н	IW11	15	3.8	11	8	12	6	2.3
		W13	12	3	8	6	12	6	1.3
NG	METER								



ALL RIP-RAP SHALL BE PROTECTED FROM RECEIVING SEDIMENT RUNOFF DURING THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL ENSURE THAT ALL RIP-RAP IS CLEAN AND FREE OF SEDIMENT AT THE

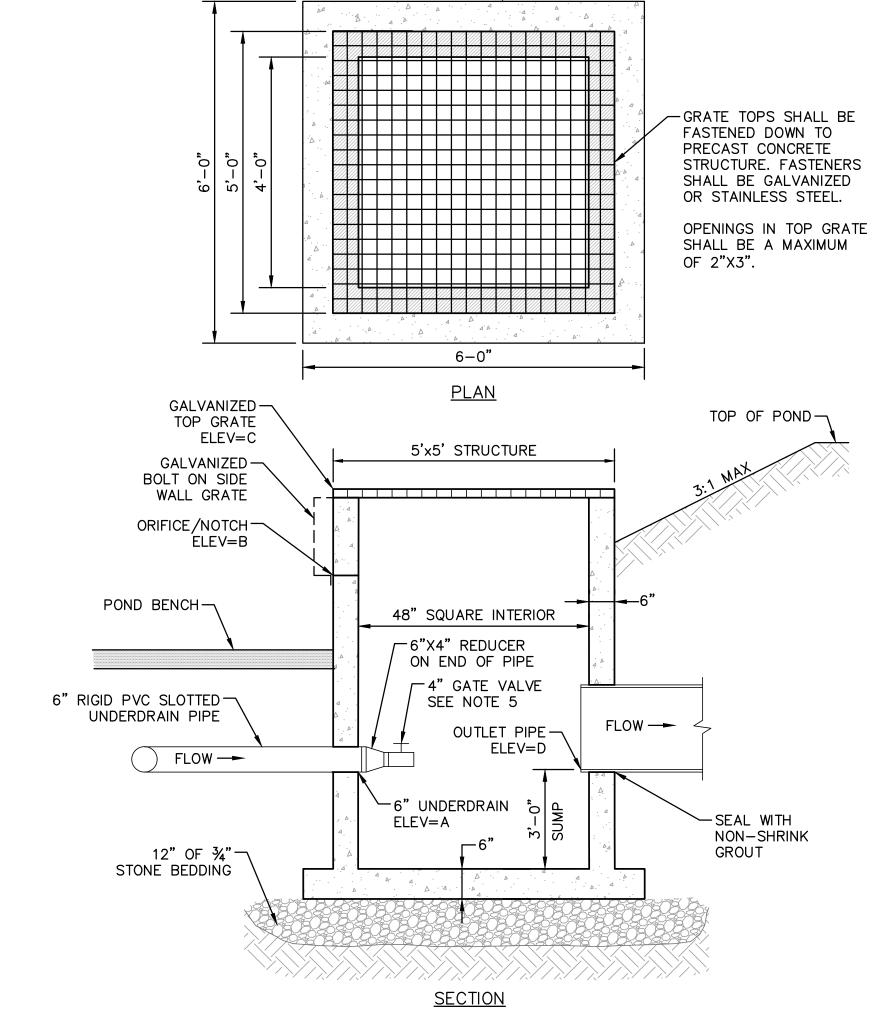
COMPLETION OF THE PROJECT.

RIP-RAP NOTE

TABLE OF DIMENSIONS

STONE LINED OUTLET PROTECTION DETAIL

SCALE: NONE



OUTLET STRUCTURE NOTES:

- 1. ALL CEMENT CONCRETE TO BE 4,000 PSI (MIN.).
- 2. GALVANIZED STEEL GRATE SHALL BE BOLTED TO TOP OF STRUCTURE.
- 3. ALL OPENINGS SHALL BE CAST IN AS REQUIRED.
- PRECAST REINFORCED CONCRETE STRUCTURE TO MEET ASTM C-478 DESIGNATION AND H-20 LOADING.
- 5. THE 4" GATE VALVE CONNECTED TO THE UNDERDRAIN SHALL BE ADJUSTED TO THE PROVIDE THE SQ. IN. OPENING SHOWN IN THE TABLE BELOW TO PROVIDE A CHANNEL PROTECTION VOLUME DRAIN DOWN TIME OF GREATER THAN 24 HOURS.

WET POND	UNDERDRAIN INV.IN A	GATE VALVE OPENING	ORIFICE/ NOTCH INV.IN B	ORIFICE/ NOTCH SIZE	TOP GRATE C	OUTLET PIPE INV.OUT D	OUTLET PIPE SIZE
1	50.7	1.11 SQ. IN.	54.4	10"X15.6"	55.8	50.6	24"
2	49.8	0.76 SQ. IN.	53.3	5"	54.7	49.7	24"
3	46.6	1.9 SQ. IN.	50.6	15"X16.8"	52.25	46.5	36"

OUTLET STRUCTURE AT DETENTION POND

SCALE: NONE

DETAILS 3

CONSTRUCTION

SHAWN

TOBEY

PREPARED AS
SERVICE AND
PROPERTY OF
MAY NOT BE
DISSEMINATED
ANY MANNER,
DNICALLY, FOR
SE THAN THIS
THE WRITTEN

THIS DOCUMENT
AN INSTRUMENT
SHALL REMAIN TI
HOYLE, TANNER.
USED, REPRODUC
OR TRANSFERRED
INCLUDING ELECT
ANY OTHER PUR
PROJECT, WITHO
PERMISSION OF

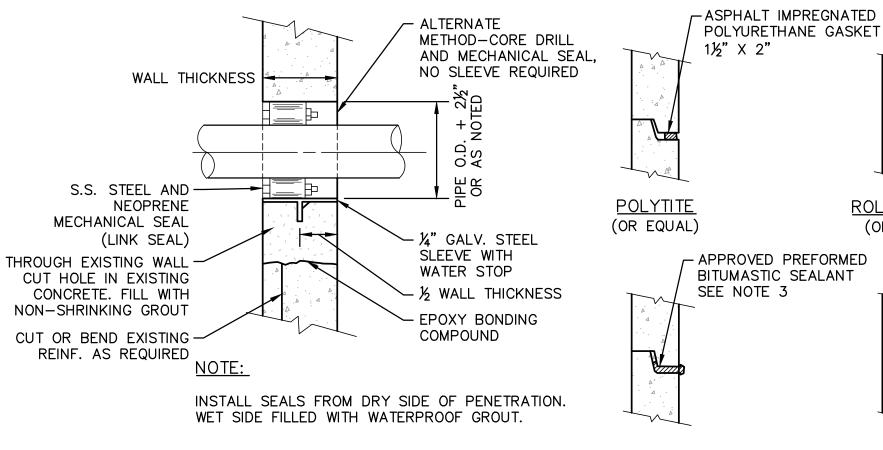
Fannel

Social

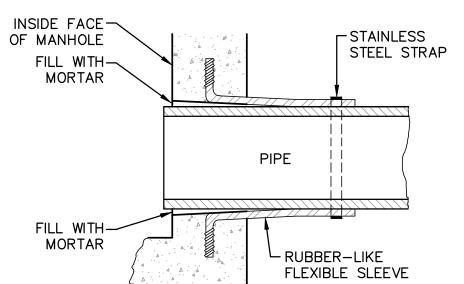
PROJECT NO. 569200 SHEET 23 OF 28

SEWER TRENCH DETAIL

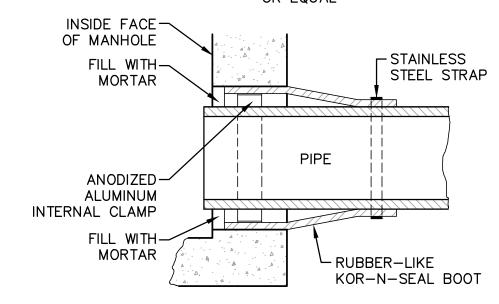
SCALE: NONE



WALL SLEEVE DETAIL



<u>LOCK-JOINT FLEXIBLE MANHOLE SLEEVE</u> OR EQUAL



KOR-N-SEAL JOINT SLEEVE OR EQUAL

NOTE:

BITUMASTIC

ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

RUBBER—LIKE

ROLL-N-LOK

(OR EQUAL)

<u>O-RING</u>

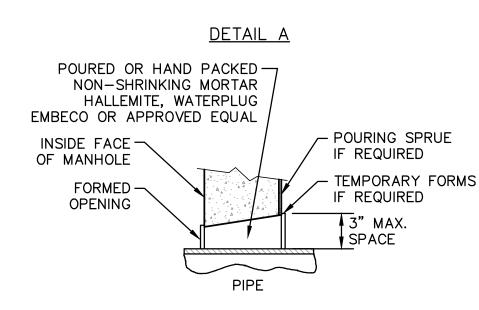
GASKET ROLLS

- RUBBER-LIKE

O-RING SET

IN RECESS

OUT OF RECESS



NON-SHRINKING MORTAR (SEE NOTE 4)

SLEEVE AND GASKET NOTES:

- HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE ENGINEER, WHICH TYPE SHALL, IN GENERAL, DEPEND FOR WATERTIGHTNESS UPON AN ELASTOMERIC OR MASTIC-LIKE GASKET.
- 2. PIPE TO MANHOLE JOINTS SHALL BE ONLY AS APPROVED BY THE ENGINEER AND IN GENERAL, WILL DEPEND FOR WATERTIGHTNESS UPON ELASTOMERIC SEALANT.
- 3. FOR BITUMASTIC TYPE JOINTS THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY.
- 4. NON-SHRINKING MORTAR SHALL ONLY BE USED WHERE SPECIFICALLY APPROVED BY THE ENGINEER.

SEWER MANHOLE JOINT AND PIPE CONNECTION DETAILS

SCALE: NONE

STANDARD SANITARY SEWER BRICK INVERT DETAILS SCALE: NONE

- 36" FRAME AND COVER RATED FOR H-20 LOADINGS. COVER LABELED WITH "SEWER" ADJUST TO GRADE WITH-BRICK OR PRECAST FRAME TO BE SET CONCRETE RINGS MAX. 12" IN BED OF MORTAR **ADJUSTMENT** SEAL WITH "FLEX-SEAL UTILITY SEALANT" AS MANUFACTURED BY SEALING SYSTEMS, INC. OR Z ECCENTRIC CONE WATERPROOF COMPOUND PIPE SEE DETAILS FOR OPENING APPROVED JOINTING 48" MIN. **METHODS** 5" REINFORCED SEE DETAILS FOR-APPROVED JOINTING METHODS -COMPACTED SUBGRADE

SEWER NOTES:

MANHOLES: THE MANHOLE, INCLUDING ALL COMPONENT PARTS, SHALL HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE SHOWN ON THE DRAWING. MANHOLES MAY BE AN ASSEMBLY OF PRECAST SECTIONS WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE, CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.

TYPICAL SECTION

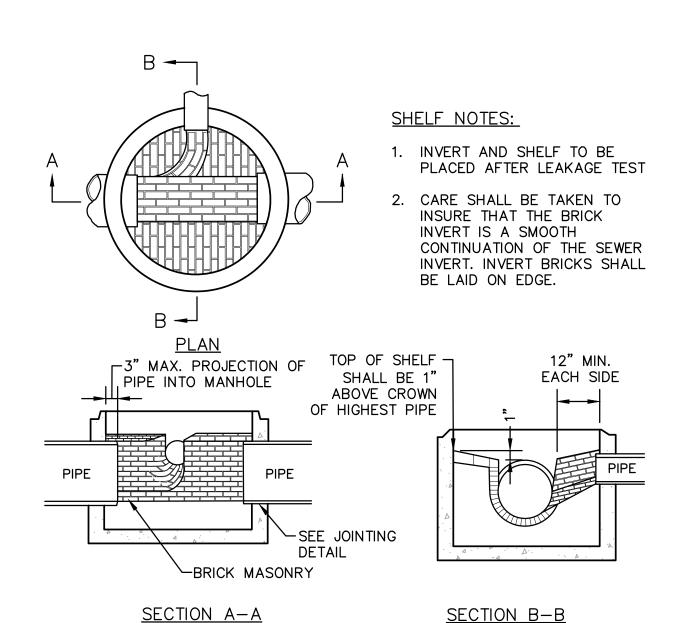
- 2. INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.
- 3. SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER SHALL BE USED, WHERE INDICATED, HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS. SEE DETAILS.
- 4. RISER SECTION: THE RISER SECTION SHALL HAVE THE EXTERIOR WRAPPED WITH WRAPIDSEAL MANHOLE ENCAPSULATION SYSTEM AS MANUFACTURED BY CCI PIPE PROTECTION PRODUCTS OR APPROVED EQUAL.

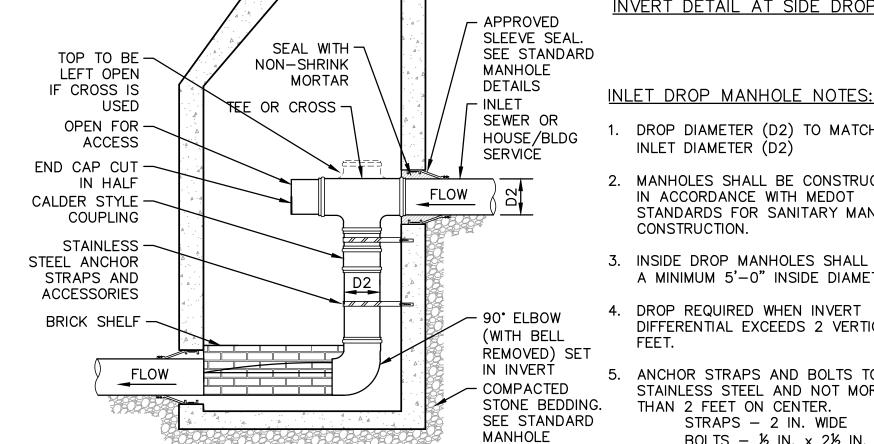
MANHOLE NOTES:

- 1. BASE SECTION TO BE FULL WALL THICKNESS AND MONOLITHIC TO A POINT 6" ABOVE THE PIPE CROWN.
- 2. THERE SHALL BE NO STEPS IN ANY OF THE SEWER MANHOLES

STANDARD SANITARY SEWER MANHOLE DETAIL

SCALE: NONE





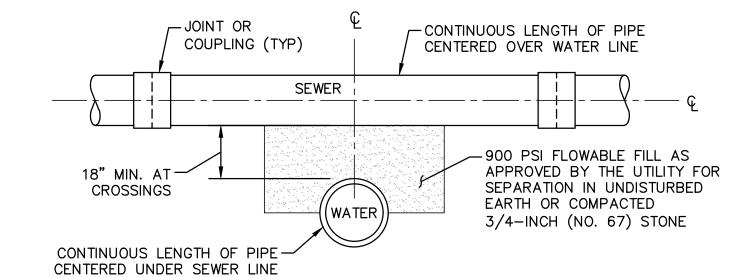
 $0.8 \times PIPE DIA. (D1)^{2}$ INVERT DETAIL AT SIDE DROPS

- 1. DROP DIAMETER (D2) TO MATCH INLET DIAMETER (D2)
- 2. MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH MEDOT STANDARDS FOR SANITARY MANHOLE CONSTRUCTION.
- 3. INSIDE DROP MANHOLES SHALL HAVE A MINIMUM 5'-0" INSIDE DIAMETER.
- 4. DROP REQUIRED WHEN INVERT DIFFERENTIAL EXCEEDS 2 VERTICAL
- 5. ANCHOR STRAPS AND BOLTS TO BE STAINLESS STEEL AND NOT MORE THAN 2 FEET ON CENTER. STRAPS - 2 IN. WIDE BOLTS - ½ IN. x 2½ IN. LONG



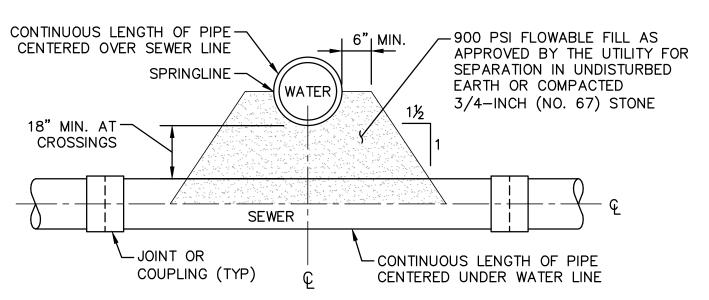
INLET DROP SEWER MANHOLE DETAIL

SCALE: NONE



DETAILS

WATER CROSSING UNDER SEWER



WATER CROSSING OVER SEWER

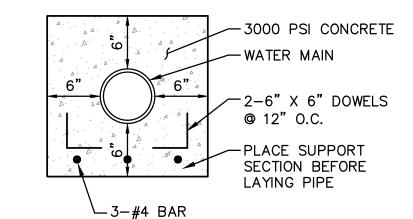
CROSSING NOTES:

- 1. SEE PLAN AND PROFILE FOR CROSSING LOCATIONS,
- 2. IF A CONTINUOUS LENGTH OF PIPE CANNOT BE CENTERED AT THE CROSSING OR IF 18" VERTICAL SEPARATION CANNOT BE ACHIEVED, THE LOWER PIPE SHALL BE INCASED IN CONCRETE 10'-0" IN EACH DIRECTION (SEE DETAIL). THE CONCRETE IS SUBSIDIARY TO THE PIPE INSTALLATION. CONTACT ENGINEER FOR DIRECTION BEFORE PROCEEDING IF THIS SITUATION IS ENCOUNTERED.



WATER/SEWER PIPE CROSSING DETAIL

SCALE: NONE



ENCASEMENT NOTES:

- 1. CONCRETE ENCASEMENT OF UTILITY PIPE WILL BE REQUIRED AS SHOWN ON THE PLANS OR WHEN UTILITY CROSSING REQUIREMENTS CANNOT BE MET.
- 2. CONCRETE ENCASEMENT SHALL EXTEND 10'-0" MIN. ON EACH SIDE OF UTILITY CROSSING



CONCRETE ENCASEMENT DETAIL

SCALE: NONE

CONSTRUCTION **DETAILS 4**

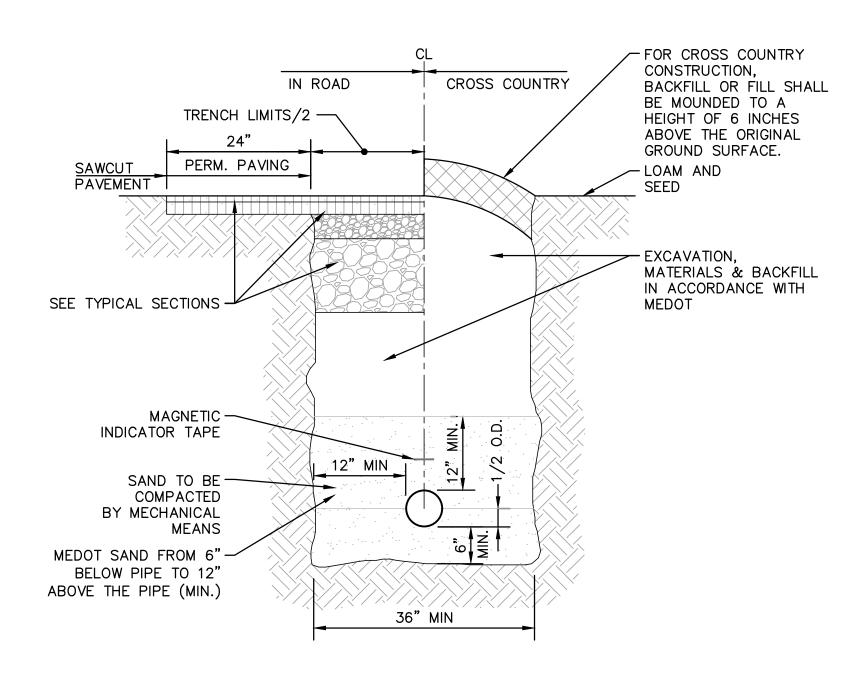
SHAWN

TOBEY

PREPARED AS
SERVICE AND
PROPERTY OF
MAY NOT BE
DISSEMINATED
ANY MANNER,
DNICALLY, FOR
SE THAN THIS
THE WRITTEN

ates, Inc

PROJECT NO. 569200 SHEET 24 OF 28

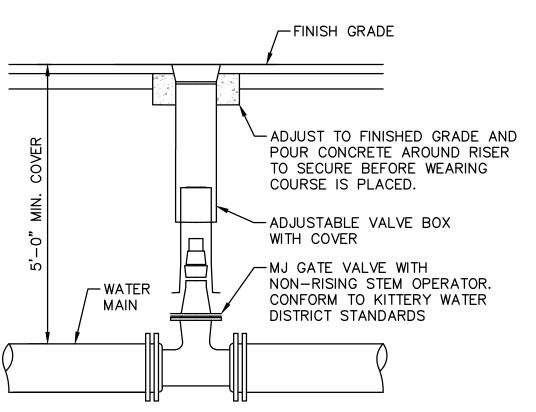


WATERLINE TRENCH NOTES:

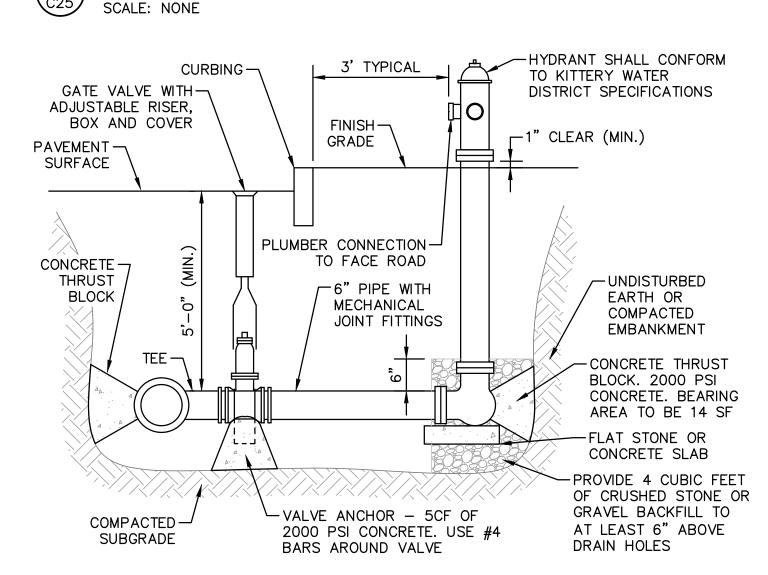
- APPROVED MATERIAL: SHALL BE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOPSOIL, CLUMPS MORE THAN 3" DIA., ALL EXCAVATED LEDGE ROCK, STUMPS OR ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.
- 2. SEWER AND WATER PIPING RUNNING APPROXIMATELY PARALLEL MUST BE SEPARATED BY A HORIZONTAL DISTANCE OF TEN FEET MINIMUM.
- 3. WATER MAINS ARE TO HAVE A MINIMUM COVER OF 5'-0" FT.

WATER LINE TRENCH DETAIL

SCALE: NONE



GATE VALVE DETAIL



FIRE HYDRANT ASSEMBLY DETAIL

SCALE: NONE



SECTION VIEW

✓ 7 \ TYPICAL LIGHT BASE POLE DETAILS

SCALE: NONE

-CONCRETE PATIO

POLYURETHANE

PIPE & CAP

HORIZONTAL BEND

STANDARD BEND

SCALE: NONE

POLE

WATER LINE THRUST BLOCK DETAILS

BLOCK WRAPPED IN

<u>VERTICAL BEND - SECTION</u>

REACTION TYPE

OTHER TEST

PRESSURES

REACTIONS

FOR THE

ABOVE

1. POUR THRUST BLOCKS AGAINST

THRUST BOCK NOTES:

MATERIAL

-#5 REBAR

CONCRETE TO BE

DETERMINED BY

- VOLUME OF

ENGINEER

PIPE SIZE

0.89 | 2.19 | 3.92 | 5.57 | 8.62

0.65 | 1.55 | 2.76 | 4.19 | 6.09

0.13 | 0.30 | 0.54 | 0.77 | 1.19

TEST PRESSURE TO BE 200 PSI

MINIMUM AT LOW END OF THE

SQUARE FEET OF CONCRETE

THRUST BLOCKING FOR OTHER

TEST PRESSURES IS DIRECTLY PROPORTIONAL TO THE ABOVE

1.08 | 1.54

0.48 | 1.19 | 2.12 | 3.01

10"

12"

THRUST BLOCK SCHEDULE

SQUARE FEET OF CONCRETE THRUST

BLOCKING BEARING ON UNDISTURBED MATERIAL

0.25 | 0.60 |

TEST SECTION.

- UNDISTURBED MATERIAL. WHERE TRENCH HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE
- 2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
- 3. PLACE CONCRETE PATIO BLOCKS IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCK.
- 4. REQUIREMENTS OF THE ABOVE TABLE PRESUME MINIMUM SOIL BEARING OF 1 TON PER SQUARE FOOT AND MAY BE VARIED BY THE ENGINEER TO MEET OTHER CONDITIONS ENCOUNTERED.
- RETAINER GLANDS ARE REQUIRED FOR ALL MECHANICAL JOINTS. THESE GLANDS DO NOT REDUCE THE REQUIREMENTS FOR THRUST RESTRAINT.
- 6. ALL FITTINGS SHALL BE WRAPPED IN POLYETHYLENE OR BUILDING PAPER PRIOR TO INSTALLATION OF CONCRETE RESTRAINT.
- THREADED RODS SHALL BE ANSI A242 FY50 PIPE RESTRAINT NUTS TO MATCH AIWA C111. THREADED RODS AND NUTS TO BE FIELD COATED WITH BITUMINOUS PAINT.
- 8. THRUST RESTRAINT IS REQUIRED FOR ALL TEES, BENDS, REDUCERS, CAPS PLUGS, OR CROSSES.
- 9. INSTALL LIFT HOOKS INTO THRUST BLOCKS AT END CAPS AND PLUGS.
- 10. ALL WATERLINE CONSTRUCTION SHALL BE INSTALLED IN ACCORDANCE WITH THE KITTERY WATER DISTRICT SPECIFICATIONS

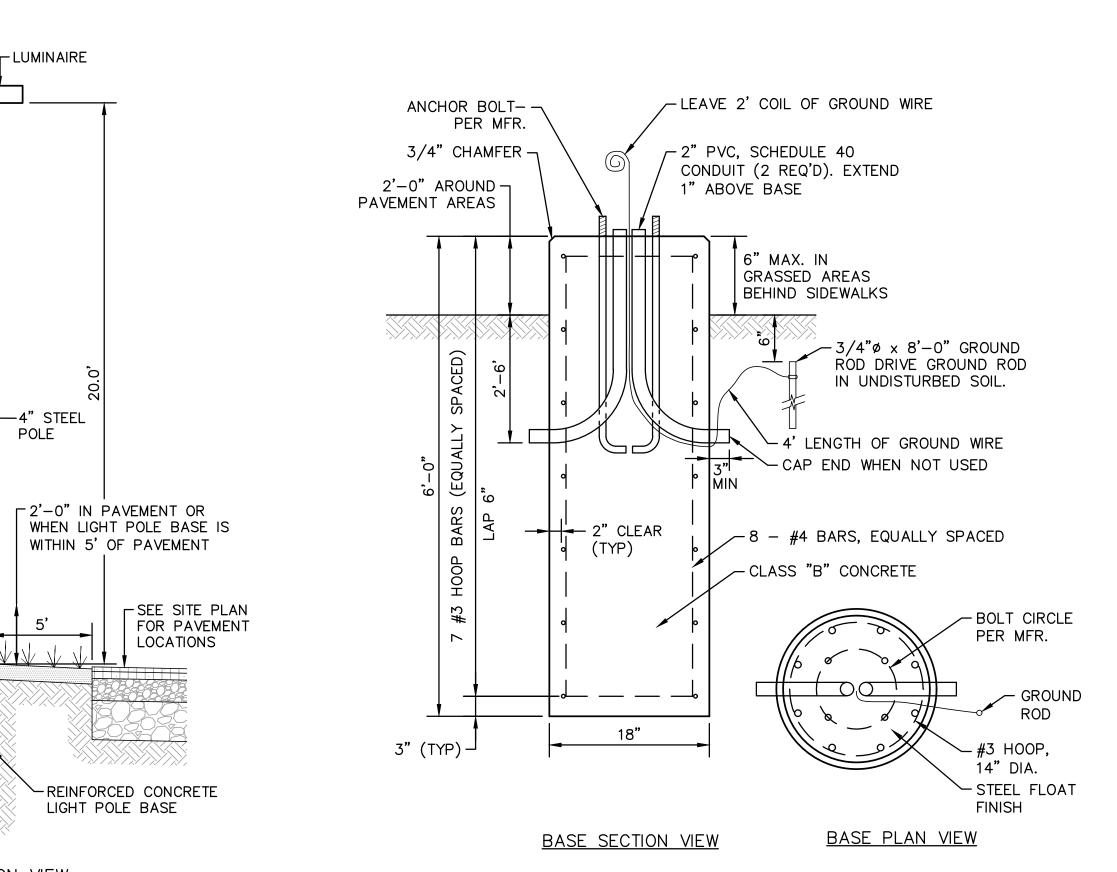
_2 LAYERS OF 2" THICK BY 4'-0" WIDE RIGID BOARD INSULATION FINISHED WITH STAGGERED JOINTS REQUIRED IF COVER IS LESS THAN 4'-0" 4'-0" VARIES 6'-0" MIN. -MJ BEND FITTING WITH THRUST BLOCKS (TYP) 6" MIN. ─ -SEWER, LAYER DRAIN OR OF SAND DUCT BANK SEE NOTE 2 — PROPOSED WATER MAIN 2 LAYERS OF 2" THICK— -CRUSHED STONE BY 4'-0" WIDE RIGID BEDDING └NO JOINTS BOARD INSULATION WITH UNDER ─6" MIN. LAYER STAGGERED JOINTS CROSSING OF SAND REQUIRED IF CROSSING VARIES UNDER A DRAIN LINE 6'-0" MIN.

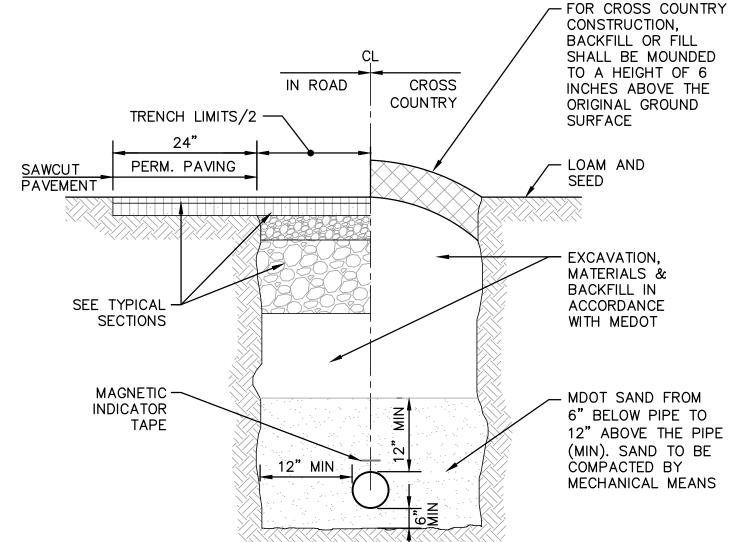
CROSSING NOTES:

- 1. SEE PLAN AND PROFILE FOR CROSSING LOCATIONS.
- 2. DROP WATER LINE BELOW UTILITY CONFLICT WITH 4 MJ BEND FITTINGS.
- 3. VERTICAL SEPARATION BETWEEN WATER LINES, SEWER LINES AND ALL OTHER UTILITIES SHALL BE A MINIMUM OF 18".









TRENCH NOTES:

- 1. ELECTRICAL CONDUIT SHALL BE SCHEDULE 40 PVC AND SHALL CONFORM TO THE APPLICABLE SECTIONS OF NEMA TC-2-1990 AND BE UL LISTED.
- 2. ALL PVC CONDUIT JOINTS SHALL BE CEMENTED.
- 3. A SUITABLE PULL CABLE, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE ELECTRICAL CONDUIT.
- 4. COORDINATE SIZE OF CONDUIT WITH OWNER.
- 5. DEPTH OF CONDUIT SHALL BE 36" TO INVERT.



SCALE: NONE

DETAILS 5 PROJECT NO. 569200

ates, Inc

TOBEY

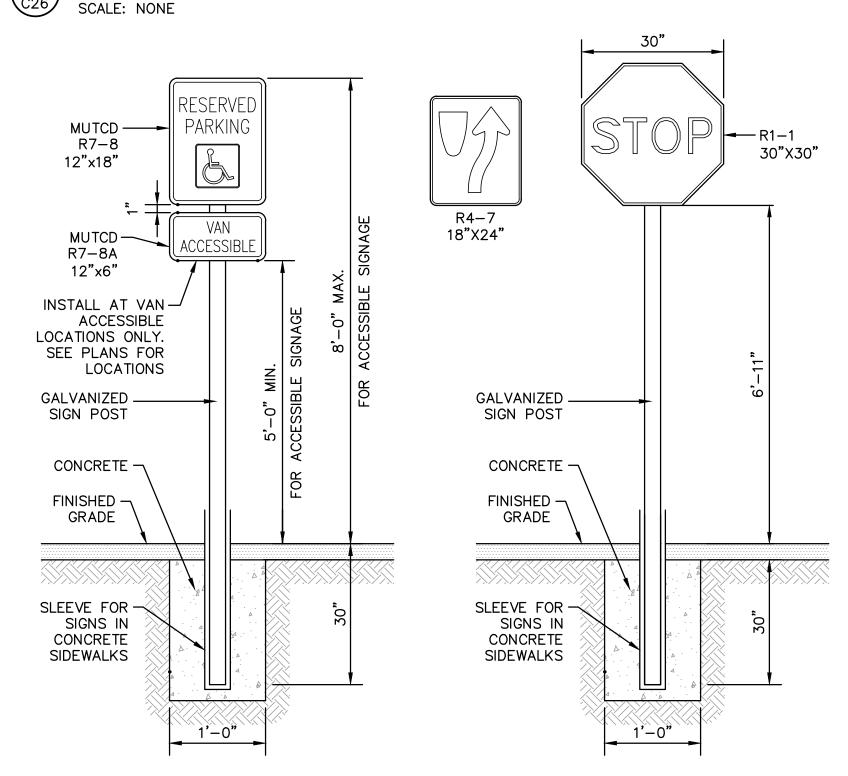
CONSTRUCTION

SHEET 25 OF 28

TRENCH NOTES:

- COORDINATE TRENCH DETAIL WITH ALL UTILITY OWNERS.
- 2. ELECTRICAL CONDUIT SHALL BE SCHEDULE 40 PVC
- 3. ALL PVC CONDUIT JOINTS SHALL BE CEMENTED.
- 4. A SUITABLE PULL CABLE, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE ELECTRICAL CONDUIT.
- 5. COORDINATE SIZE AND NUMBER OF CONDUIT WITH UTILITY OWNER.
- 6. DEPTH OF CONDUIT SHALL BE 36" TO INVERT.
- 7. TRENCH WIDTH AS REQUIRED TO MAINTAIN 6" MINIMUM SPACING BETWEEN ALL CONDUITS AND TRENCH SIDEWALLS.

PRIMARY CIRCUIT W/ TELEPHONE AND/OR CABLE TV ELEC. TRENCH

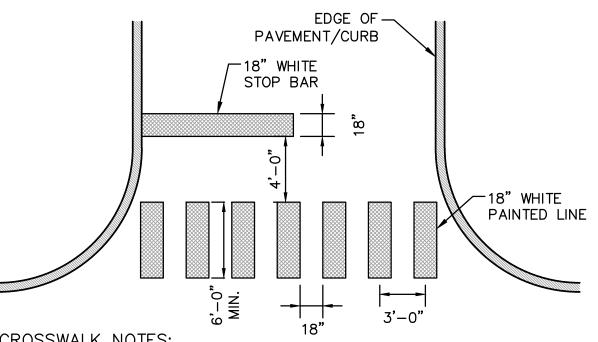


SIGN NOTES:

- 1. ALL SIGNAGE SHALL BE IN CONFORMANCE WITH THE CURRENT EDITION OF THE M.U.T.C.D.
- 2. ACCESSIBLE PARKING SIGN TO BE INSTALLED AT HEAD OF ALL DESIGNATED PARKING SPACES.
- 3. SIGNS IN CONCRETE AREAS SHALL BE INSTALLED WITH AN ANCHOR SLEEVE.
- 4. REFER TO SITE PLANS FOR TYPE OF SIGN AND SIGN INSTALLATION LOCATIONS.

TYPICAL SIGN MOUNTING DETAILS

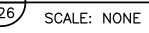
SCALE: NONE

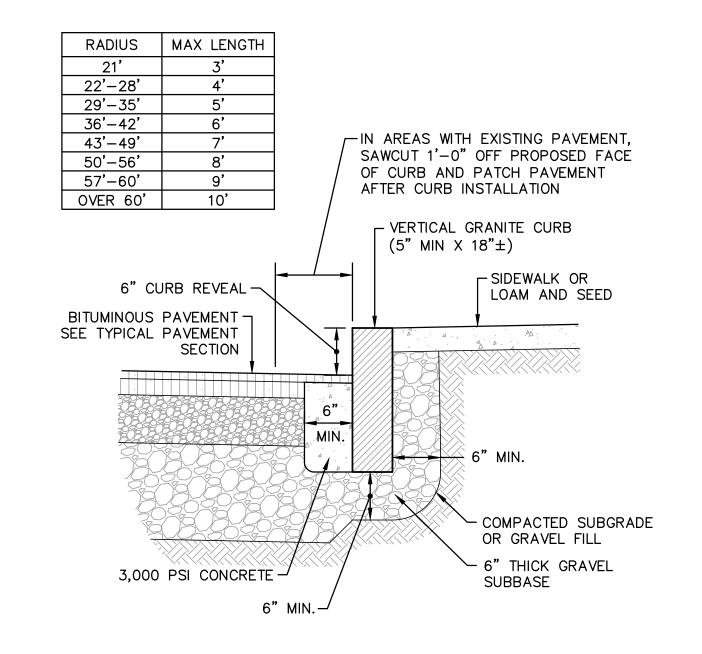


CROSSWALK NOTES:

- 1. CROSSWALK LINES SHALL BE CENTERED TO AVOID WHEEL MARKS.
- 2. ALL CROSSWALK LINES TO BE SAME LENGTH AND PROPERLY ALIGNED.
- 3. SEE PLANS FOR THE CROSSWALK LOCATIONS.

PAINTED CROSSWALK DETAIL





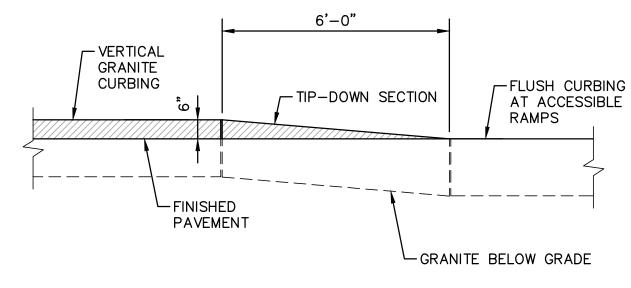
VERTICAL GRANITE CURB NOTES:

- 1. MINIMUM LENGTH OF CURB STONES 3'
- 2. MAXIMUM LENGTH OF CURB STONES 10'
- 3. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES SEE CHART.
- 4. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY
- 5. CURB ENDS TO BE TIPPED DOWN.

THE SAME LENGTH.

VERTICAL GRANITE CURB DETAIL

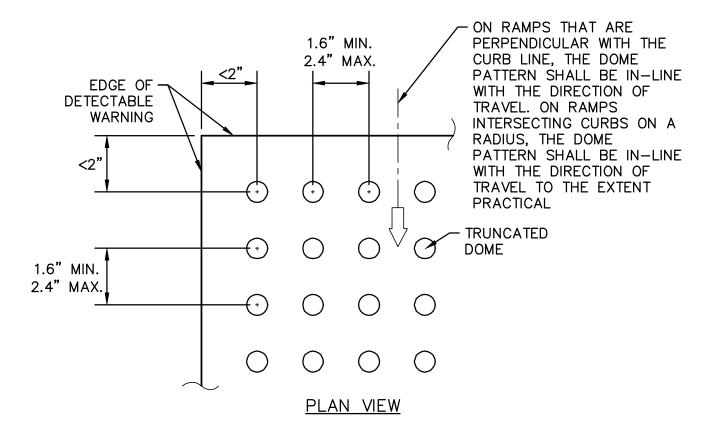
SCALE: NONE

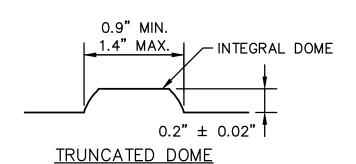


1. REFER TO SITE PLANS FOR CURB TIP-DOWN LOCATIONS

VERTICAL GRANITE TIP-DOWN DETAIL

SCALE: NONE

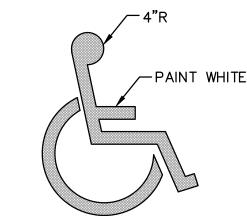


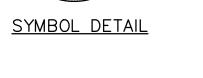


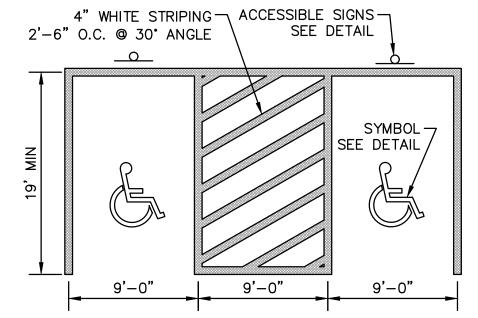
DETECTABLE WARNING NOTES:

- BASE-TO-BASE SPACING SHALL BE 0.65" MINIMUM BETWEEN DOMES.
- 2. ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES FROM THE BACK OF CURB.
- 3. THE TOP WIDTH OF THE DOME SHALL BE A MINIMUM OF 50% AND A MAXIMUM OF 65% OF THE BASE DIAMETER.
- 4. WARNING PANELS TO BE CAST IRON AND PAINTED YELLOW.

TYPICAL DETECTABLE WARNING DETAILS SCALE: NONE





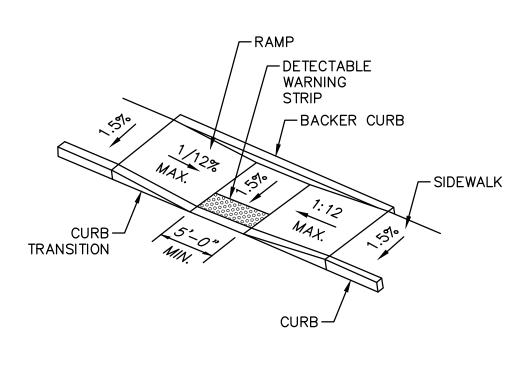


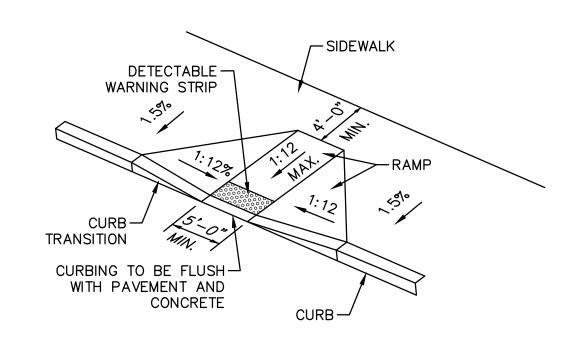
STALL LAYOUT NOTES:

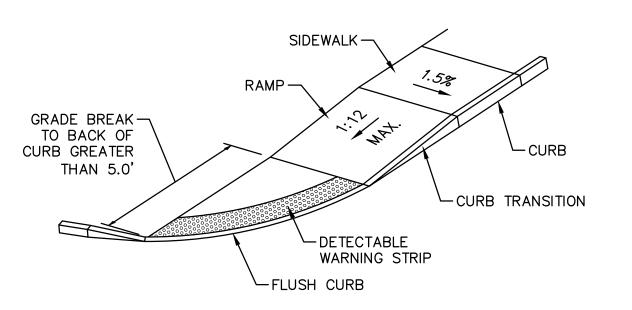
- 1. ALL PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH THESE STANDARDS AND THE CURRENT EDITION OF MUTCD.
- 2. WIDTH OF LINES SHALL VARY NO MORE THAN \pm 1/4 INCH FROM THAT SPECIFIED.
- 3. THE WET FILM THICKNESS OF A PAINTED LINE SHALL BE A MINIMUM OF 20 MILS THROUGHOUT THE ENTIRE WIDTH AND LENGTH OF LINE SPECIFIED. OVERSPRAY SHALL BE KEPT TO AN ABSOLUTE MINIMUM.
- 4. BROKEN LINES SHALL BEGIN AND END WITH THE NEAREST FULL CYCLE OF BROKEN LINE.
- 5. SOLID LONGITUDINAL LINES SHALL BEGIN AND END WITHIN \pm 2 INCHES OFF A LAYOUT SYMBOL INDICATING THE END OF THE LINE, OR WITH A FULL CYCLE OF BROKEN LINE (IF APPROPRIATE).

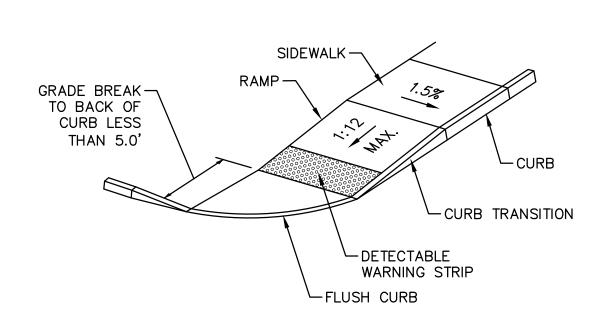
ACCESSIBLE PARKING STALL LAYOUT

SCALE: NONE









SIDEWALK RAMP NOTES:

- 1. THE MAXIMUM ALLOWABLE SIDEWALK AND TIP-DOWN RAMP CROSS SLOPE SHALL BE 2.0% (1% MIN.)
- 2. THE MAXIMUM ALLOWABLE SLOPE OF THE ACCESSIBLE ROUTE EXCLUDING TIP-DOWN RAMPS SHALL BE 5%.
- 3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT TIP-DOWN RAMPS SHALL BE 1:12.
- 4. A MINIMUM OF 3 FEET CLEARANCE SHALL BE PROVIDED BETWEEN ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE. 5. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO
- PREVENT PONDING. 6. AN ADA DETECTABLE WARNING TRUNCATED DOME PANEL SHALL FINISH TRANSVERSE THE SLOPE OF THE TIP-DOWN RAMP.DETECTIBLE WARNING
- PANELS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE
- PAVEMENT.

7. CURBING SHALL BE SET FLUSH WHERE TIP-DOWN RAMP ABUTS

8. MAINTAIN THE NORMAL GUTTER PROFILE THROUGHOUT THE RAMP AREA. INTERCEPT DRAINAGE ALONG THE CURB IN ADVANCE OF THE RAMP.



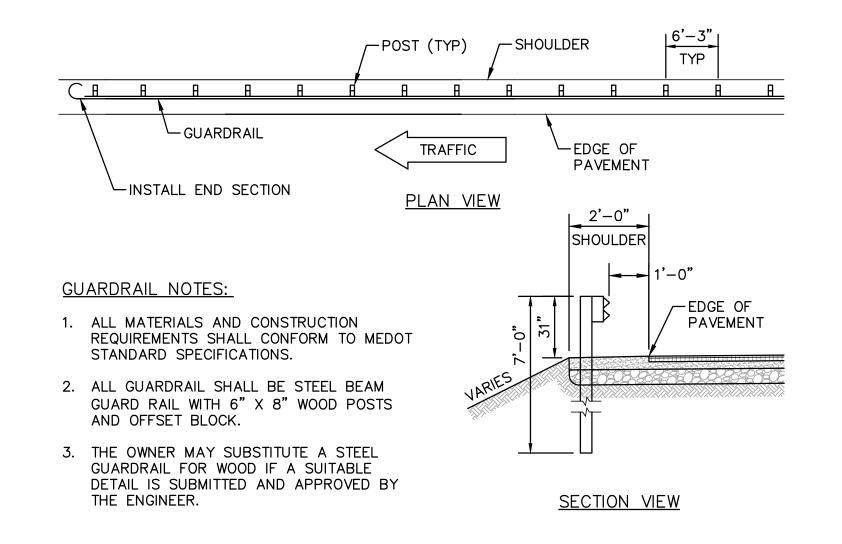
SCALE: NONE

TOBEY ates, Inc

CONSTRUCTION

DETAILS 6

PROJECT NO. 569200 SHEET 26 OF 28

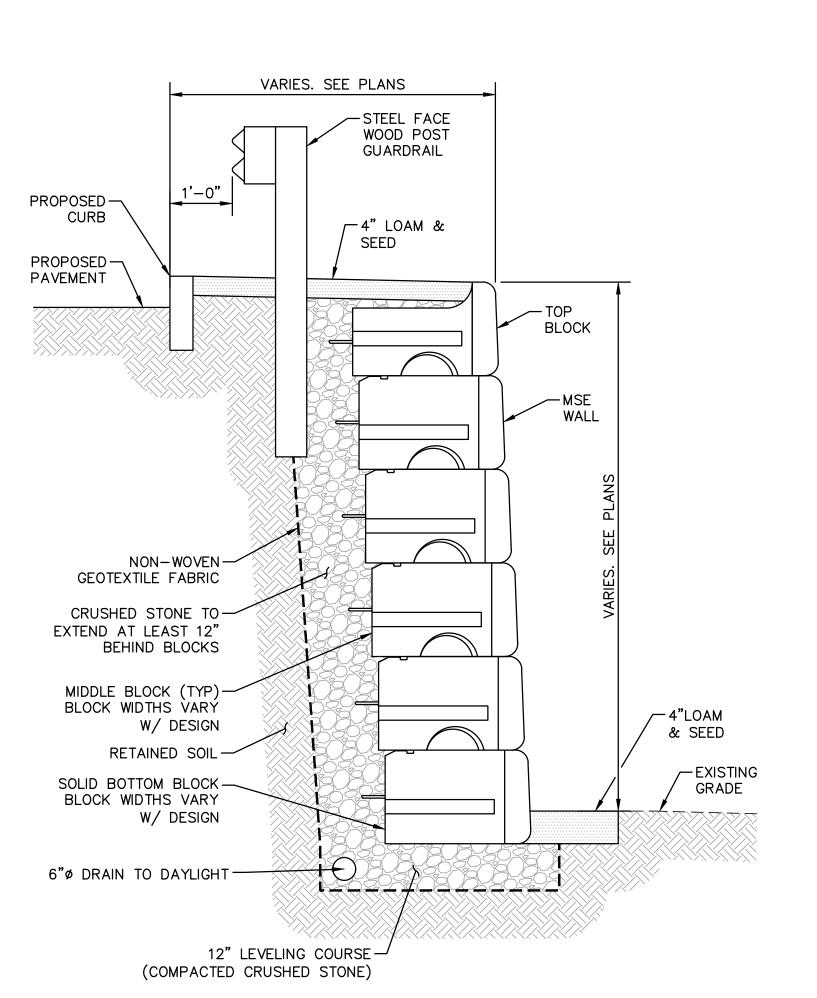


-ROUND CONCRETE TO PREVENT PONDING WATER 6" I.D. SCHED. 40 STEEL -PIPE FILLED W/ CONCRETE SEE PAVEMENT OR-CONC. SECTIONS FACE OF 18" Ø AUGERED -HOLE OR TUBE FORM 4,000 PSI CONC. FOOTING DIA. ✓ 4 \ STEEL PIPE BOLLARD DETAIL

SCALE: NONE

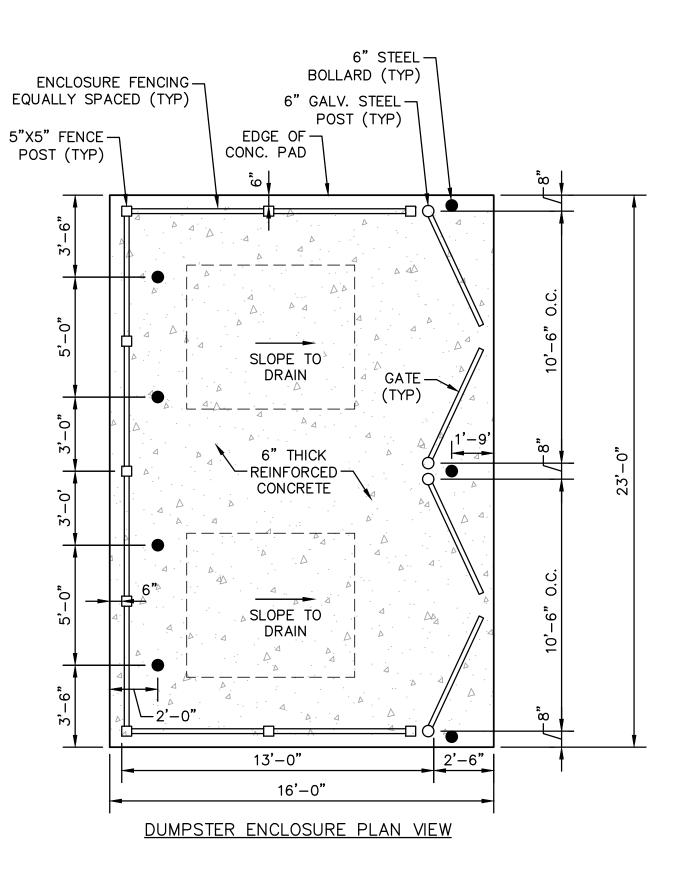
STEEL FACE WOOD POST GUARDRAIL

SCALE: NONE



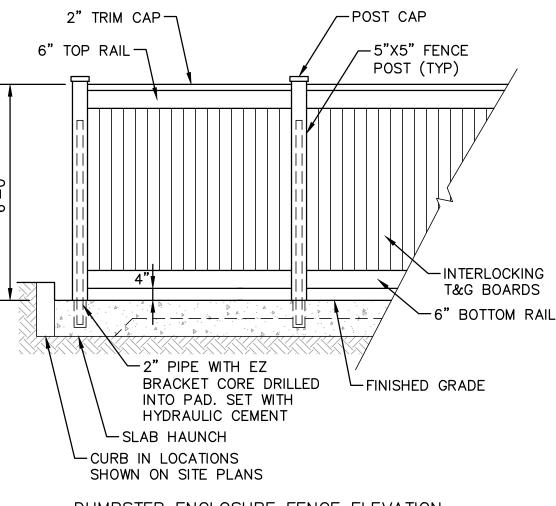
WALL NOTES:

- 1. THIS DETAIL IS FOR REFERENCE ONLY. DETERMINATION OF THE SUITABILITY AND/OR MANNER OF USE OF ANY DETAILS CONTAINED IN THIS DOCUMENT IS THE SOLE RESPONSIBILITY OF THE DESIGN ENGINEER OF RECORD. FINAL WALL DESIGNS, INCLUDING ALL CONSTRUCTION DETAILS, SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER USING THE ACTUAL CONDITIONS OF THE PROPOSED SITE.
- 2. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- 3. CONTRACTOR SHALL COORDINATE WITH GUARDRAIL MANUFACTURER FOR MINIMUM DISTANCE BETWEEN GUARDRAIL AND RETAINING WALL.

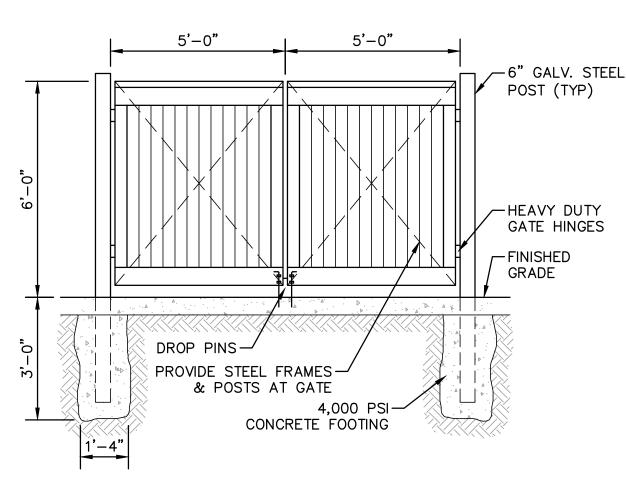


DUMPSTER ENCLOSURE NOTES:

- 1. THE CONTRACTOR SHALL SUBMIT A FENCING & GATE DETAIL FOR OWNER APPROVAL PRIOR TO ENCLOSURE CONSTRUCTION.
- 2. FENCING MATERIAL SHALL BE PAINTED WOOD OR VINYL. COLOR TO BE OFF WHITE OR MATCH BUILDING ACCENT COLORS.
- 3. DUMPSTER GATES SHALL MATCH FENCING MATERIAL.
- 4. ALL ENCLOSURE HARDWARE INCLUDING HINGES, LATCHES, DROP PINS & FASTENERS SHALL BE HEAVY DUTY COMMERCIAL GRADE WITH A WEATHER RESISTANT COATING. HARDWARE COLOR SHALL BE BLACK OR MATCH BUILDING ACCENT COLORS.



DUMPSTER ENCLOSURE FENCE ELEVATION



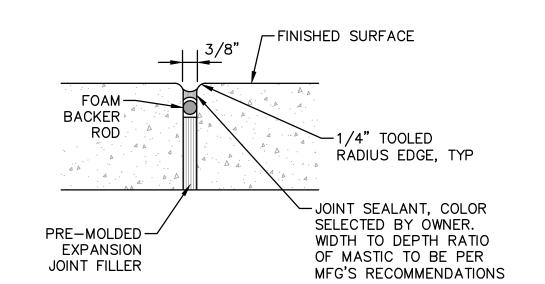
DUMPSTER ENCLOSURE GATE ELEVATION

3.5" BIT. CONC. PAVEMENT 1.5" SURFACE COURSE MEDOT 9.5mm HOT MIX ASPHALT 2.0" BINDER COURSE MEDOT 19.0mm HOT MIX ASPHALT 6" MEDOT 703.06 AGGREGATE BASE TYPE A 12" MEDOT 703.06 AGGREGATE SUBBASE TYPE D COMPACTED SUBGRADE OR GRAVEL FILL

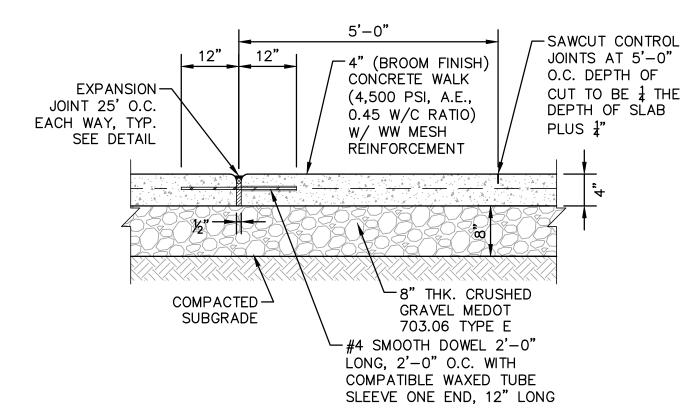
PAVEMENT NOTES:

- 1. THE BASE AND SUBBASE MATERIALS SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THEIR MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557.
- 2. HOT MIX ASPHALT PAVEMENT SHOULD BE COMPACTED TO 92 TO 97 PERCENT OF ITS THEORETICAL MAXIMUM DENSITY AS DETERMINED BY ASTM D-2042.
- 3. A TACK COAT SHOULD BE USED BETWEEN SUCCESSIVE LIFTS OF BITUMINOUS PAVEMENT

TYPICAL SITE PAVEMENT SECTION SCALE: NONE



EXPANSION JOINT DETAIL

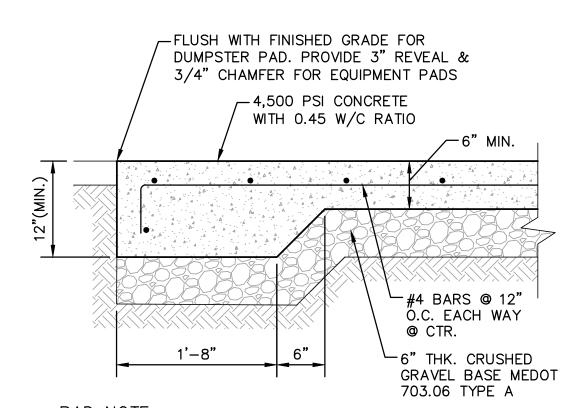


TYPICAL SECTION

CONCRETE WALK NOTES NOTES:

- 1. THE CONTRACTOR SHALL INSTALL EXPANSION JOINTS EVERY 25'-0" ON CENTER AND CONTROL JOINTS AT 5'-0" ON CENTER.
- 2. THE CONTROL JOINTS SHALL BE SAWCUT AS SHOWN IN THE DETAIL ABOVE OR TOOLED CONTROL JOINTS WITH A 1/4" RADIUS.

6 \ TYPICAL CONCRETE WALKWAY DETAIL SCALE: NONE



PAD NOTE:

1. REFER TO SITE PLANS FOR DUMPSTER & EQUIPMENT PAD





DOUBLE DUMPSTER PAD ENCLOSURE DETAIL

SCALE: NONE

PROJECT NO. 569200 SHEET 27 OF 28

CONSTRUCTION

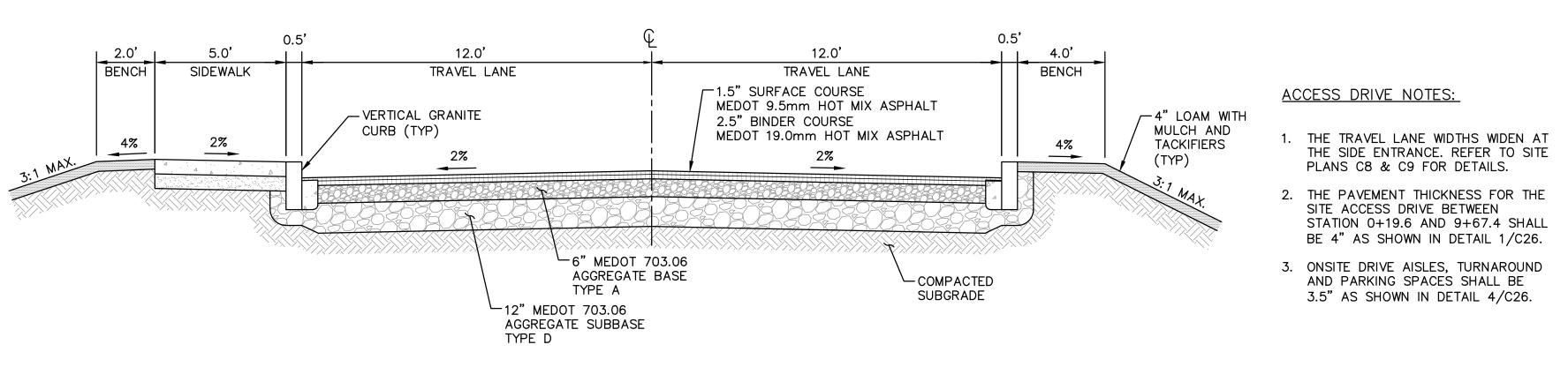
DETAILS 7

SHAWN

TOBEY

THIS DOCUMENT IS PAN INSTRUMENT OF SHALL REMAIN THE PHOYLE, TANNER. IT NOSED, REPRODUCED, IN CLUDING ELECTRON ANY OTHER PURPOSE PROJECT, WITHOUT PERMISSION OF HOYL

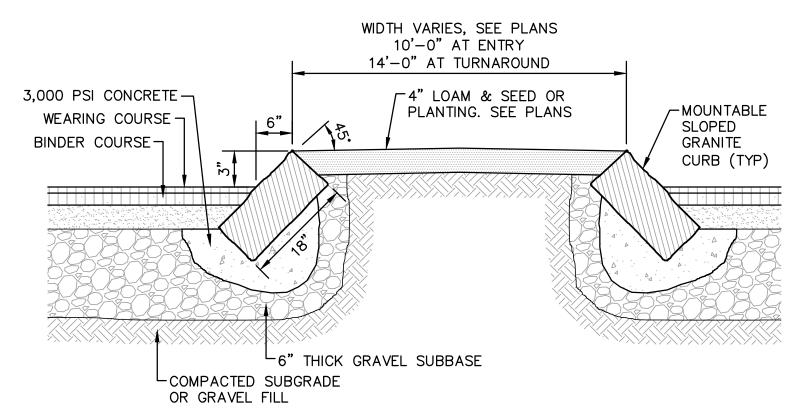
Fannel at es, In on the last of the last o



TYPICAL ONSITE ACCESS DRIVE SECTION

SLOPED GRANITE CURB & ISLAND DETAIL

SCALE: NONE

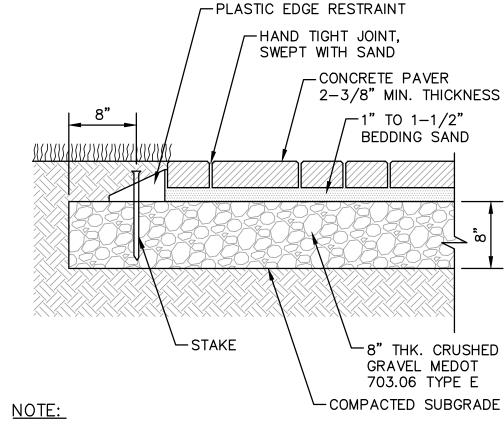


SLOPED GRANITE CURB NOTES:

- 1. MINIMUM LENGTH OF CURB STONES 3'
- 2. MAXIMUM LENGTH OF CURB STONES 10'
- 3. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES - SEE CHART.
- 4. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME

LENGTH.

RADIUS	MAX LENGTH
21'	3'
22'-28'	4'
29'-35'	5'
36'-42'	6'
43'-49'	7'
50'-56'	8'
57'-60'	9'
OVER 60'	10'



- 1. FINAL PAVER STYLE AND COLOR TO BE CHOSEN BY OWNER.
- 2. THE CONTRACTOR SHALL PROVIDE A PAVER SUBMITTAL FOR OWNER APPROVAL PRIOR TO ENCLOSURE CONSTRUCTION.

┌─4" MIN. LOAM

SEED MIXTURES AND APPLICATION RATES.

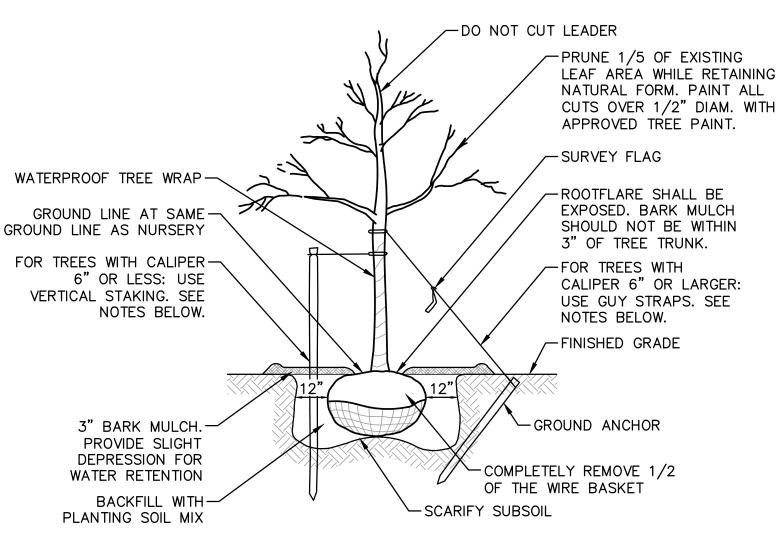
GRASS PLANTING DETAIL

SCALE: NONE

FINISHED GRADE

SCARIFIED SUBGRADE

CONCRETE PAVER SETTING DETAIL SCALE: NONE



DECIDUOUS TREE PLANTING

NOTE:

SCALE: NONE

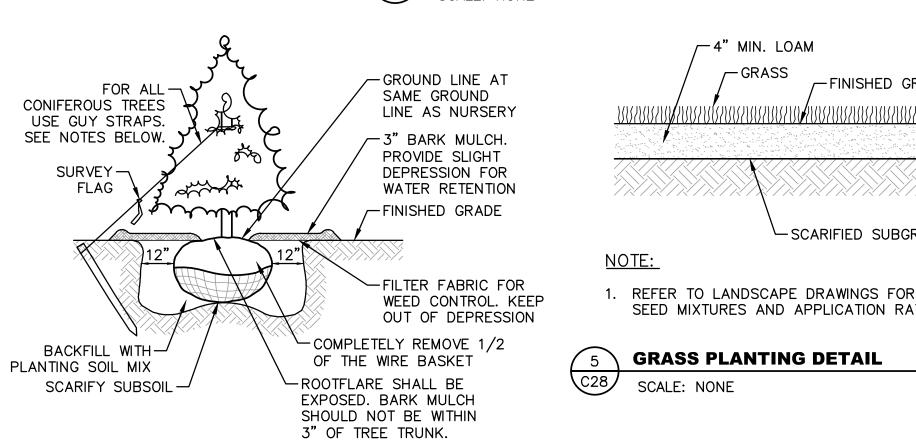
1. REMOVE ALL TREE STAKING & GUY STRAPS AFTER TWO GROWING SEASONS.

DECIDUOUS TREES GREATER THAN 6" CALIPER & ALL CONIFEROUS:

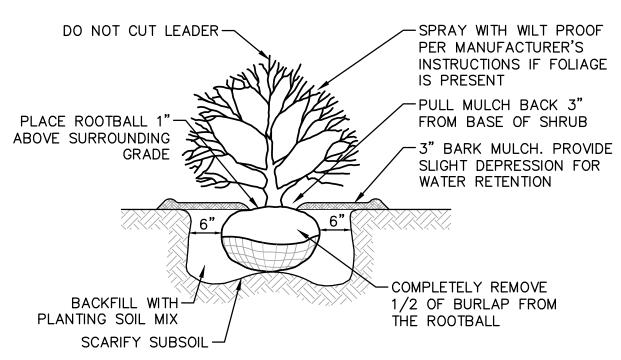
- 1. PROVIDE (3) WIDE WOVEN POLYPROPYLENE GUY STRAPS @ 120 DEGREE SPACING.
- 2. ATTACH TO TREE @ 1/2-2/3 HEIGHT OF TREE ABOVE GRADE.
- 3. ANCHOR WITH 2"X3' HARDWOOD STAKE BURIED BELOW GRADE AND CLEAR OF ROOT BALL.

DECIDUOUS TREES LESS THAN 6" CALIPER:

- 1. PROVIDE (3) 2"X3" HARDWOOD STAKES @ 120 DEGREE SPACING, MIN. 36" IN GROUND AND CLEAR OF ROOT BALL.
- 2. ATTACHED TO TREE WITH WIDE WOVEN POLYPROPYLENE STRAPS.







SHRUB PLANTING

TYPICAL TREE PLANTING DETAILS

Tanner Hoyle,
Assoc CONSTRUCTION **DETAILS 8**

TOBEY

PROJECT NO. 569200

SHEET 28 OF 28

SCALE: NONE