

SITE PLAN FOR MULTIFAMILY HOUSING REDEVELOPMENT PROJECT 7 TANTALLON ROAD ANDOVER, MA.

HOWARD STEIN HUDSON
114 Turnpike Road, Suite 2C
Chelmsford, MA 01824
www.hshassoc.com

PREPARED FOR:
Neil Rosenberg
7 Tantallon Road
Andover, MA 01810

**THE TANTALLON
PROPOSED MULTIFAMILY
REDEVELOPMENT PROJECT
7 TANTALLON ROAD
ANDOVER, MA, 01810**

GENERAL NOTES:

1. EXISTING PROPERTY LINE AND UTILITY INFORMATION SHOWN IS BASED ON AN EXISTING SURVEY CONDUCTED BY A-PLUS CONSTRUCTION SERVICES CORPORATION, REVISED THROUGH MARCH 12, 2019.
2. THE ACCURACY AND COMPLETENESS OF THE UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION, SIZE, TYPE, ETC. OF ALL UNDERGROUND UTILITIES THAT MAY BE AFFECTED BY THE WORK. AT LEAST 72 HOURS BEFORE EXCAVATION, THE CONTRACTOR SHALL BE REQUIRED TO CONTACT DIGSAFE AT 1-888-344-7233.
3. THE CONTRACTOR SHALL FIELD VERIFY CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
4. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE APPROPRIATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION.
5. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE NOTIFIED, INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN, PRIOR TO EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION OR REPAVING.
6. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES EXCEPT THOSE NOTED TO BE ABANDONED, REMOVED AND DISPOSED.
7. THE CONTRACTOR SHALL DISPOSE OF ALL WASTE MATERIAL IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS AT HIS/HER OWN EXPENSE, OUTSIDE OF THE PROJECT LIMITS.
8. SITE IS LOCATED WITHIN FEMA FLOODMAP 25009C0217F EFFECTIVE 07/03/2012.

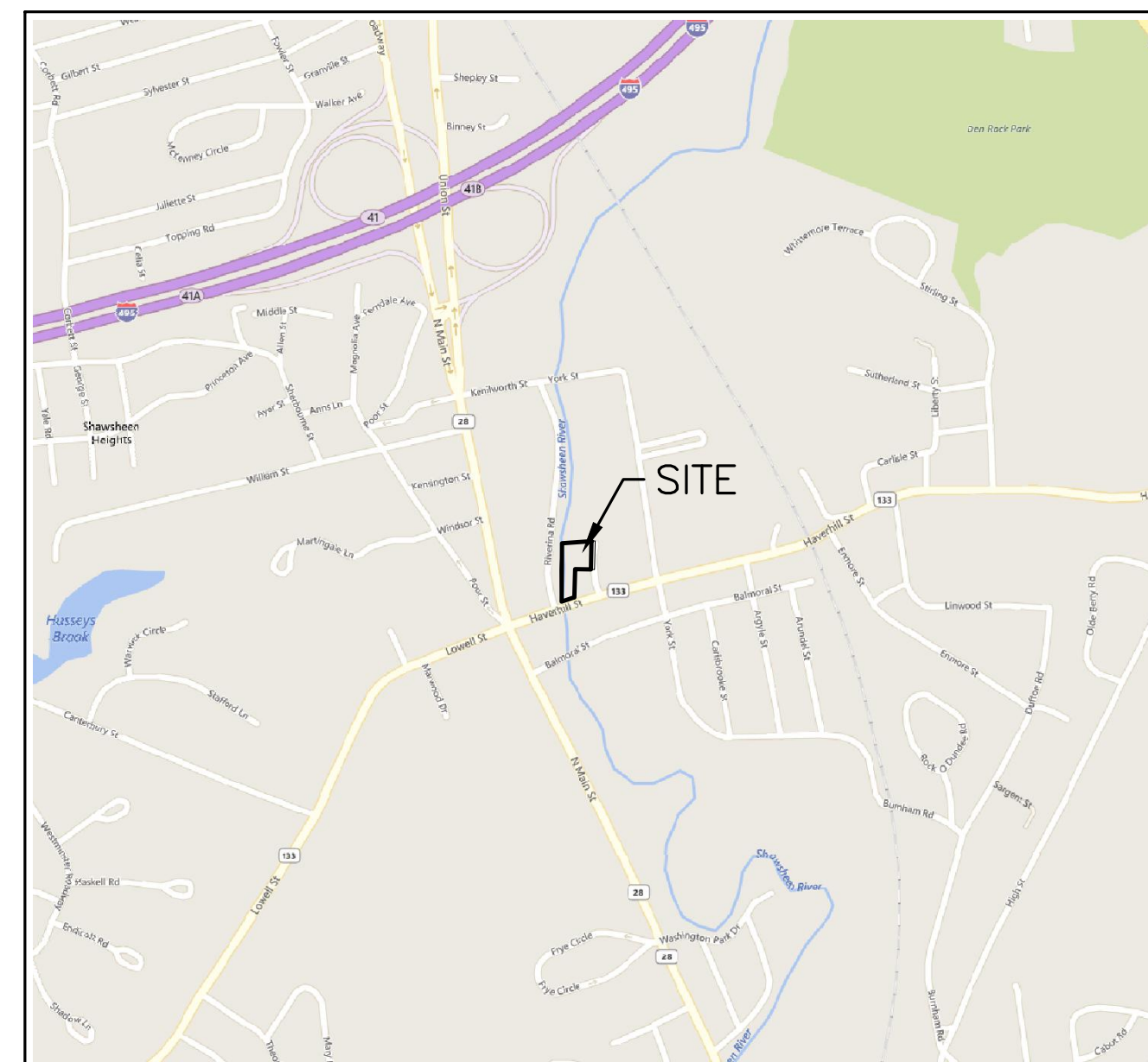
SHEET INDEX

SHEET 1	COVER SHEET
SHEET 2	DEMOLITION & EROSION CONTROL PLAN
SHEET 3	LAYOUT AND MATERIALS PLAN
SHEET 4	GRADING AND DRAINAGE PLAN
SHEET 5	UTILITY PLAN
SHEET 6	LANDSCAPE PLAN
SHEET 7	LIGHTING PLAN
SHEET 8	DETAIL SHEET 1 OF 4
SHEET 9	DETAIL SHEET 2 OF 4
SHEET 10	DETAIL SHEET 3 OF 4
SHEET 11	DETAIL SHEET 4 OF 4

EXISTING CONDITIONS PLAN

LEGEND

— X —	CHAIN-LINK FENCE	○ WF#	WETLAND FLAG
— □ —	WROUGHT IRON FENCE	■ CB	CATCH BASIN - SQUARE
— — —	STONE WALL	☀	LIGHT POLE
— — —	TREELINE	—○— UPL#	UTILITY POLE
—70—	CONTOUR	□	BOUND (CONC. STONE, LAND COURT, ETC.)
⊕	ELECTRIC MANHOLE	△	TRAVERSE POINT
⊙	SEWER MANHOLE	DH	DRILL HOLE
Ⓣ	TELEPHONE MANHOLE	○ GG	GAS GATE
Ⓢ	OTHER MANHOLE	○ WG	WATER GATE
EOP	EDGE OF PAVEMENT	⊕	MONITORING WELL
TOW	TOP OF WATER		



LOCUST MAP
1"=1000'

PROJECT TEAM:

CIVIL ENGINEER
HOWARD STEIN HUDSON
114 TURNPIKE ROAD
SUITE 2C
CHELMSFORD, MA 01824

LANDSCAPE ARCHITECT
LORAYNE BLACK
PO BOX 595
GROTON, MA 01450

ARCHITECT
LAGRASSE YANOWITZ & FEYL
1 ELM SQUARE, 3RD FLOOR
ANDOVER, MA 01810

LIGHTING CONSULTANT
CHARRON INC.
P.O. BOX 4550
MANCHESTER, NH 03108

SURVEYOR
A-PLUS CONSTRUCTION SERV. CORP.
17 ACCORD PARK DRIVE, UNIT 102
NORWELL, MA 02061

WETLAND SCIENCE
JOHN DICK
WETLAND SCIENTIST

OWNER

NEIL ROSENBERG
7 TANTALLON ROAD
ANDOVER, MA 01810

ASSESSORS INFORMATION

ASSESSORS MAP 35 LOTS 5A & 6

REFERENCES

1. EXISTING CONDITIONS SURVEY PREPARED FOR HOWARD STEIN HUDSON BY A-PLUS CONSTRUCTION SERVICES CORPORATION, REVISED THROUGH MARCH 12, 2019.

ZONING REQUIREMENTS

GB – GENERAL BUSINESS DISTRICT
FHOD – FLOOD HAZARD OVERLAY DISTRICT
DIMENSIONAL REQUIREMENTS

	REQUIREMENT	EXISTING	PROPOSED
MINIMUM LOT AREA	48,000* SF	45,346± SF	49,097± SF
MINIMUM FRONT YARD	(A)	152.3± FT	152.6± FT
MINIMUM SIDE/REAR YARD	(B)	3± FT	4± FT
BUILDING COVERAGE	66% (C)	21%	23%
MAXIMUM STORIES	4	2	4
MAXIMUM BUILDING HEIGHT	50 FT	<50 FT	50 FT

*2,000 SF OF LOT AREA IS REQUIRED PER DWELLING UNIT. TWENTY FOUR (24) UNITS ARE PROPOSED.

(A) IN THE GENERAL BUSINESS DISTRICT, THE FRONT SETBACK SHALL BE THE AVERAGE FRONT SETBACK OF EXISTING BUILDINGS ON THE BLOCK.

(B) NO BUILDING IN A BUSINESS DISTRICT SHALL BE ERECTED OR EXPANDED WITHIN 15 FEET OF A BUILDING CONTAINING A RESIDENTIAL USE, REGARDLESS OF THE ZONING DISTRICT IN WHICH SAID BUILDING CONTAINING A RESIDENTIAL USE IS LOCATED.

(C) IN A GENERAL BUSINESS DISTRICT, AN EXISTING STRUCTURE OCCUPYING MORE THAN 2/3 OF THE LOT AREA SHALL NOT BE EXPANDED. NEW STRUCTURES SHALL NOT EXCEED 2/3 OF THE LOT AREA WITHIN THE GENERAL BUSINESS DISTRICT.

PARKING REQUIREMENTS

PLANNED DEVELOPMENT – 24 UNIT MULTIFAMILY RESIDENTIAL STRUCTURE
TWO PARKING SPACES PER DWELLING UNIT

REQUIRED: 24 DWELLING UNITS X 2 SPACES/DWELLING UNIT = 48 SPACES

PROPOSED: 48 TOTAL PARKING SPACES
24 OPEN AIR PARKING SPACES UNDERNEATH THE BUILDING
16 SURFACE PARKING SPACES
8 COMPACT SURFACE PARKING SPACES
2 SIGNED VISITOR SPACES AT 16 HAVERHILL STREET
TOTAL PARKING SPACES = 24+16+8+2 = 50 TOTAL PARKING SPACES
42 PROPOSED STANDARD PARKING SPACES
8 PROPOSED COMPACT PARKING SPACES

SITE PLAN AND SPECIAL PERMITS REQUIRED

1. PER SECTION 3.1.3 – TABLE OF USE REGULATIONS – PLANNED DEVELOPMENT, MULTIFAMILY OR MIXED-USE (SECTION 7.2)
2. PER SECTION 8.3.4 – FLOOD HAZARD OVERLAY DISTRICT – REGULATIONS.

REVISIONS:

NO	BY	DATE	DESCRIPTION
12	MB	9/08/20	REV LANDSCAPE PLAN
13	PB	7/27/21	NOI SUBMISSION
14	MB	08/31/22	NOI SUBMISSION
15	MB	10/26/22	PER REVIEW COMMENTS
16	MB	11/01/22	REV PARKING
17	MB	11/17/22	PER REVIEW COMMENTS
18	MB	01/03/23	PER REVIEW COMMENTS
19	KLE	01/12/23	REMOVE 10 SP PER CC



SITE
PLAN

COVER
SHEET

DATE: 10-24-2017

PROJECT NUMBER: 17024

DESIGNED BY: TM

DRAWN BY: TM

CHECKED BY: KE

1

SHEET 1 OF 11



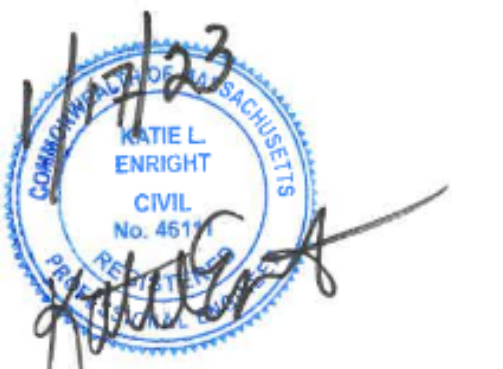
HOWARD STEIN HUDSON
 114 Turnpike Road, Suite 2C
 Chelmsford, MA 01824
 www.hshassoc.com

PREPARED FOR:
 Neil Rosenberg
 7 Tantallon Road
 Andover, MA 01810

**THE TANTALLON
 PROPOSED MULTIFAMILY
 REDEVELOPMENT PROJECT**
 7 TANTALLON ROAD
 ANDOVER, MA, 01810

REVISIONS:

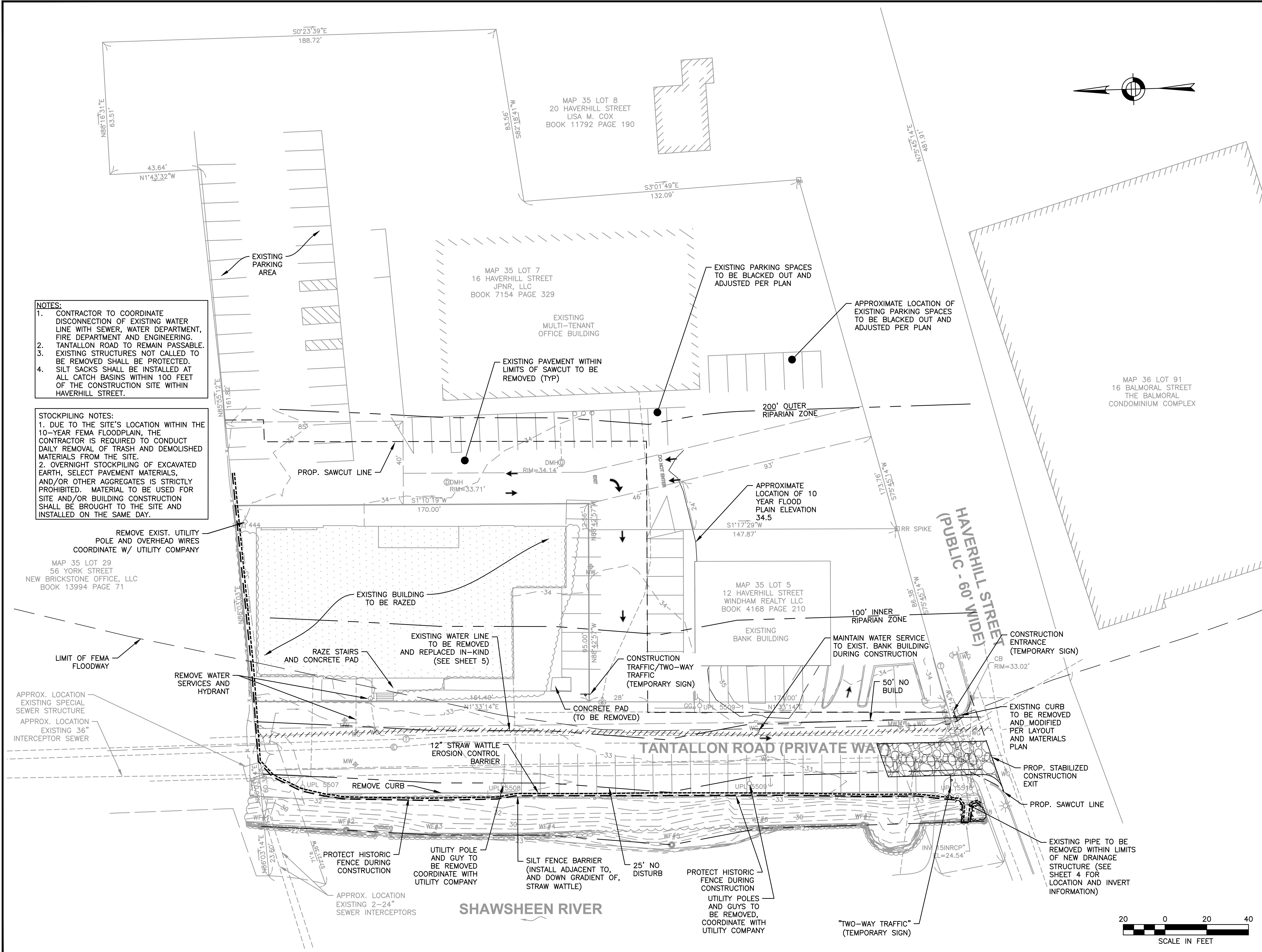
NO	BY	DATE	DESCRIPTION
12	MB	9/08/20	REV LANDSCAPE PLAN
13	PB	7/27/21	NOI SUBMISSION
14	MB	08/31/22	NOI SUBMISSION
15	MB	10/26/22	PER REVIEW COMMENTS
16	MB	11/01/22	REV PARKING
17	MB	11/17/22	PER REVIEW COMMENTS
18	MB	01/03/23	PER REVIEW COMMENTS
19	KLE	01/12/23	REMOVE 10 SP PER CC



SITE PLAN

**DEMOLITION &
 EROSION CONTROL PLAN**

DATE:	10-24-2017
PROJECT NUMBER:	17024
DESIGNED BY:	TM
DRAWN BY:	TM
CHECKED BY:	KE

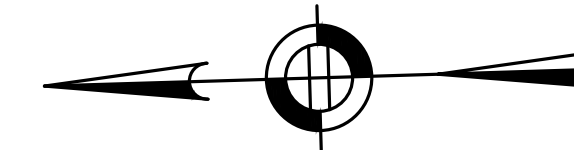


- NOTES:**
1. CONTRACTOR TO COORDINATE DISCONNECTION OF EXISTING WATER LINE WITH SEWER, WATER DEPARTMENT, FIRE DEPARTMENT AND ENGINEERING.
 2. TANTALLON ROAD TO REMAIN PASSABLE.
 3. EXISTING STRUCTURES NOT CALLED TO BE REMOVED SHALL BE PROTECTED. SILT SACKS SHALL BE INSTALLED AT ALL CATCH BASINS WITHIN 100 FEET OF THE CONSTRUCTION SITE WITHIN HAVERHILL STREET.
 4. STOCKPILING NOTES:

- STOCKPILING NOTES:**
1. DUE TO THE SITE'S LOCATION WITHIN THE 10-YEAR FEMA FLOODPLAIN, THE CONTRACTOR IS REQUIRED TO CONDUCT DAILY REMOVAL OF TRASH AND DEMOLISHED MATERIALS FROM THE SITE.
 2. OVERNIGHT STOCKPILING OF EXCAVATED EARTH, SELECT PAVEMENT MATERIALS, AND/OR OTHER AGGREGATES IS STRICTLY PROHIBITED. MATERIAL TO BE USED FOR SITE AND/OR BUILDING CONSTRUCTION SHALL BE BROUGHT TO THE SITE AND INSTALLED ON THE SAME DAY.

- NOTES:
1. DEPTHS AND EXACT LOCATION OF ALL EXISTING UNDERGROUND UTILITIES UNKNOWN. TO BE CONFIRMED PRIOR TO CONSTRUCTION AND CONFLICTS DISCUSSED WITH DESIGN ENGINEER.
 2. CONTRACTOR TO COORDINATE DISCONNECTION OF EXISTING WATER LINE WITH SEWER, WATER DEPARTMENT, FIRE DEPARTMENT AND ENGINEERING.
 3. WATER SERVICE TO THE SHAWSHEEN PUMP STATION (SPS) SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
 4. CONTRACTOR TO COORDINATE WATER MAIN CONSTRUCTION WITH THE TOWN OF ANDOVER CONTRACTOR TO FACILITATE CONSTRUCTION THAT DOES NOT INTERFERE WITH THE TOWN PROJECT.

MAP 35 LOT 8
20 HAVERHILL STREET
LISA M. COX
BOOK 11792 PAGE 190



PREPARED FOR:
Neil Rosenberg
7 Tantaloon Road
Andover, MA 01810

**THE TANTALLOON
PROPOSED MULTIFAMILY
REDEVELOPMENT PROJECT
7 TANTALLOON ROAD
ANDOVER, MA, 01810**

FEMA FLOODPLAIN NOTE:
FEMA 100-YEAR FLOOD ELEVATION (ZONE AE) IS 38, AS SHOWN ON FLOOD INSURANCE RATE MAP 25009C0217F DATED JULY 3, 2012. THIS PROJECT SITE LIES ENTIRELY WITHIN THE FEMA AE ZONE.

FEMA FLOODPLAIN NOTE:
FEMA 10-YEAR FLOOD ELEVATION IS 34.5, AS SHOWN ON ESSEX COUNTY, MASSACHUSETTS FLOOD INSURANCE STUDY, PROFILE 144P, REVISED JULY 19, 2018. THIS PROJECT SITE LIES ENTIRELY WITHIN THE FEMA 10-YEAR FLOOD ZONE.

MAP 36 LOT 91
16 BALMORAL STREET
THE BALMORAL
CONDOMINIUM COMPLEX

FLOOD ADVISORY SIGNAGE NOTE:
WARNING SIGNS INDICATING THE RISK OF RISING FLOOD WATER IS PROPOSED THROUGHOUT THE SITE. A TOTAL OF NINE (9) FLOOD WARNING SIGNS SHALL BE LOCATED AS FOLLOWS:
ONE (1) AT REAR GARAGE ENTRY; TWO (2) ALONG SOUTH BUILDING FACE; THREE (3) IN THE LANDSCAPE AREA SOUTH OF THE FRONT BUILDING ENTRY; TWO (2) ALONG THE CURBLINE OF TANTALLOON ROAD ADJACENT TO THE SHAWSHEEN RIVER AND ONE (1) IN THE GROUND-LEVEL LOBBY AREA (INSIDE THE BUILDING). THE SIGNS SHALL BE AS DEPICTED ON DETAIL SHEET 1.

REVISIONS:

NO	BY	DATE	DESCRIPTION
12	MB	9/08/20	REV LANDSCAPE PLAN
13	PB	7/27/21	NOI SUBMISSION
14	MB	08/31/22	NOI SUBMISSION
15	MB	10/26/22	PER REVIEW COMMENTS
16	MB	11/01/22	REV PARKING
17	MB	11/17/22	PER REVIEW COMMENTS
18	MB	01/03/23	PER REVIEW COMMENTS
19	KLE	01/12/23	REMOVE 10 SP PER CC



MAP 35 LOT 29
56 YORK STREET
NEW BRICKSTONE OFFICE, LLC
BOOK 13994 PAGE 71

CONNECT TO EXIST. GAS SERVICE COORDINATE WITH UTILITY COMPANY

BACKFLOW PREVENTER & CLEANOUT W/ CAST IRON COVER

50 LF, 6"SDR35 PVC S=0.035 ft/ft

CONNECT TO EXISTING WATER MAIN

APPROX. LOCATION EXISTING 36" INTERCEPTOR SEWER

DEPTHS OF EXISTING UTILITIES UNKNOWN, TO BE CONFIRMED PRIOR TO CONSTRUCTION AND CONFLICTS DISCUSSED W/ DESIGN ENGINEER

CONNECT TO EXIST. UTILITY POLE COORDINATE WITH UTILITY COMPANY

EXISTING SEWER INVERTS WERE ESTIMATED AND ASSUMED. CONTRACTOR TO VERIFY INVERTS PRIOR TO CONSTRUCTION AND VERIFY ENGINEER IF THERE IS A SIGNIFICANT VARIATION TO ASSUMED INVERTS.

PROP. HYDRANT

ELEC./COMM./TELEPHONE

FIRE SERVICE

DOMESTIC WATER SERVICE

SEWER SERVICE INV.=27.44

GAS SERVICE

DMH RIM=33.71'

DMH RIM=34.14'

50' NO BUILD

5' BIT. SIDEWALK

25' NO DISTURB BUFFER

WYE CONNECTION INV.=25.69

APPROX. LOCATION EXISTING 2-24" SEWER INTERCEPTORS

EXISTING SEWER LINE TO BE CAMERA INSPECTED TO DETERMINE CURRENT CONDITION & FEASIBILITY OF USABILITY PRIOR TO CONSTRUCTION IN CONSULTATION W/ ANDOVER SEWER DEPARTMENT & ENGINEER OF RECORD. ANY INEFFICIENCIES IN EXISTING SERVICE ENCOUNTERED WITHIN THE PROPERTY BOUNDARIES DURING INSPECTION SHALL BE FIXED.

UNDERGROUND ELECTRIC LINE (TYP)

CONNECT TO EXIST. UNDERGROUND UTILITIES COORDINATE WITH UTILITY COMPANY

EXISTING MULTI-TENANT OFFICE BUILDING

APPROXIMATE LOCATION OF ENTRANCE (TYP)

PROPOSED LOT LINE (TYP.)

200' OUTER RIPARIAN ZONE

TEMPORARY WATER SERVICE SHALL BE PROVIDED TO EXIST. BANK BUILDING DURING REPLACEMENT. CONTRACTOR/UTILITY TO COORDINATE W/ PROPERTY OWNER, WATER DEPT. AND FIRE CHIEF.

MAP 35 LOT 5
12 HAVERHILL STREET
WINDHAM REALTY LLC
BOOK 4168 PAGE 210

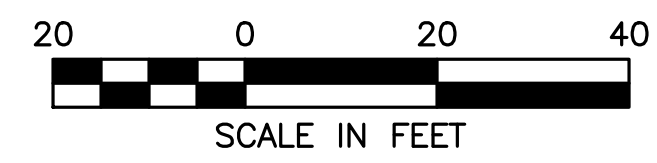
EXISTING BANK BUILDING

100' INNER RIPARIAN ZONE

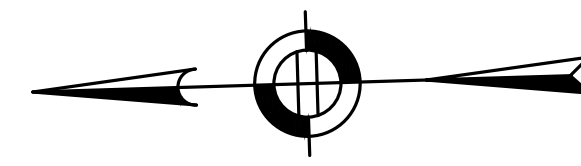
RECONNECT EXISTING WATER SERVICES

8" CLDI WATER MAIN REPLACED IN-KIND

REMOVE EXISTING GATE AND REPLACE WITH NEW 10"x8" TEE & GATE VALVE



EXISTING MULTI-TENANT OFFICE BUILDING



Lorayne Black ASLA
Landscape Architect

978.302.0448
lorayne@lorayneblack.com
P.O. Box 595, Groton, MA 01450

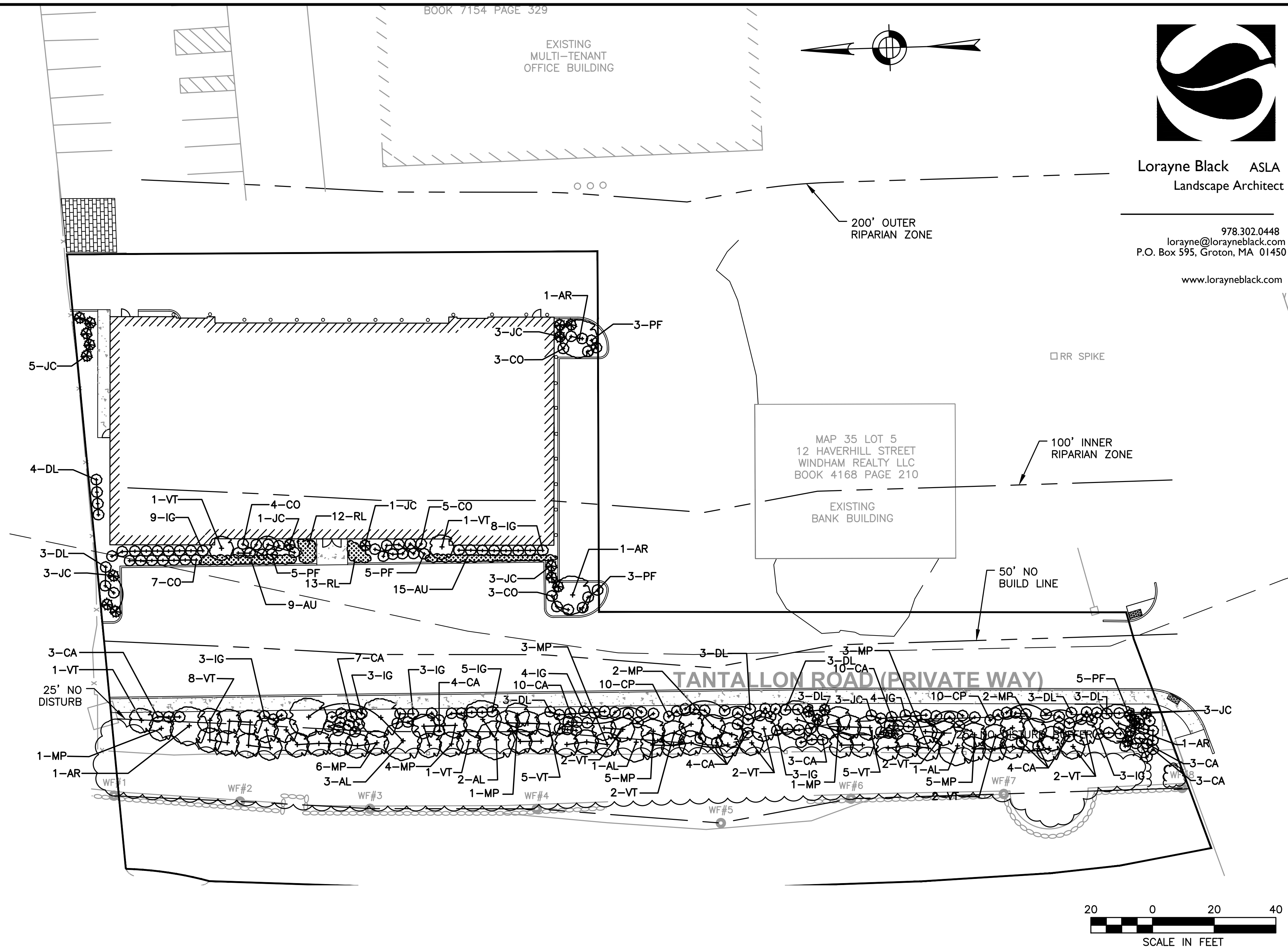
www.lorayneblack.com

HOWARD STEIN HUDSON
114 Turnpike Road, Suite 2C
Chelmsford, MA 01824
www.hshassoc.com

PREPARED FOR:
Neil Rosenberg
7 Tantaloon Road
Andover, MA 01810

**THE TANTALLOON
PROPOSED MULTIFAMILY
REDEVELOPMENT PROJECT**
7 TANTALLOON ROAD
ANDOVER, MA, 01810

- NOTES:**
1. ALL SEED AND HERBACEOUS GROUND COVER AREAS WILL BE TRIMMED DURING FIRST GROWING SEASON TO A HEIGHT OF 8 INCHES.
 2. DURING SECOND GROWING SEASON, ANY MATERIAL STANDING FROM THE PREVIOUS YEAR WILL BE TRIMMED TO APPROXIMATELY 2 INCHES IN EARLY SPRING.
 3. AFTER SECOND GROWING SEASON, SEEDED AREAS WILL BE TRIMMED IN THE EARLY SPRING AND LATE FALL TO A HEIGHT OF 6 INCHES.
 4. PROBLEM WEEDS WILL BE HAND PULLED.
 5. PLANTING SPACING AND LAYOUT FOR HERBACEOUS/GROUND COVER PLANTS TO BE INSTALLED IN MIXED GROUPS OF 3, 5, AND 7 VARIETY CLUSTERS, EACH PLANT WITHIN CLUSTER, SPACED APPROXIMATELY 10-INCH ON CENTER.

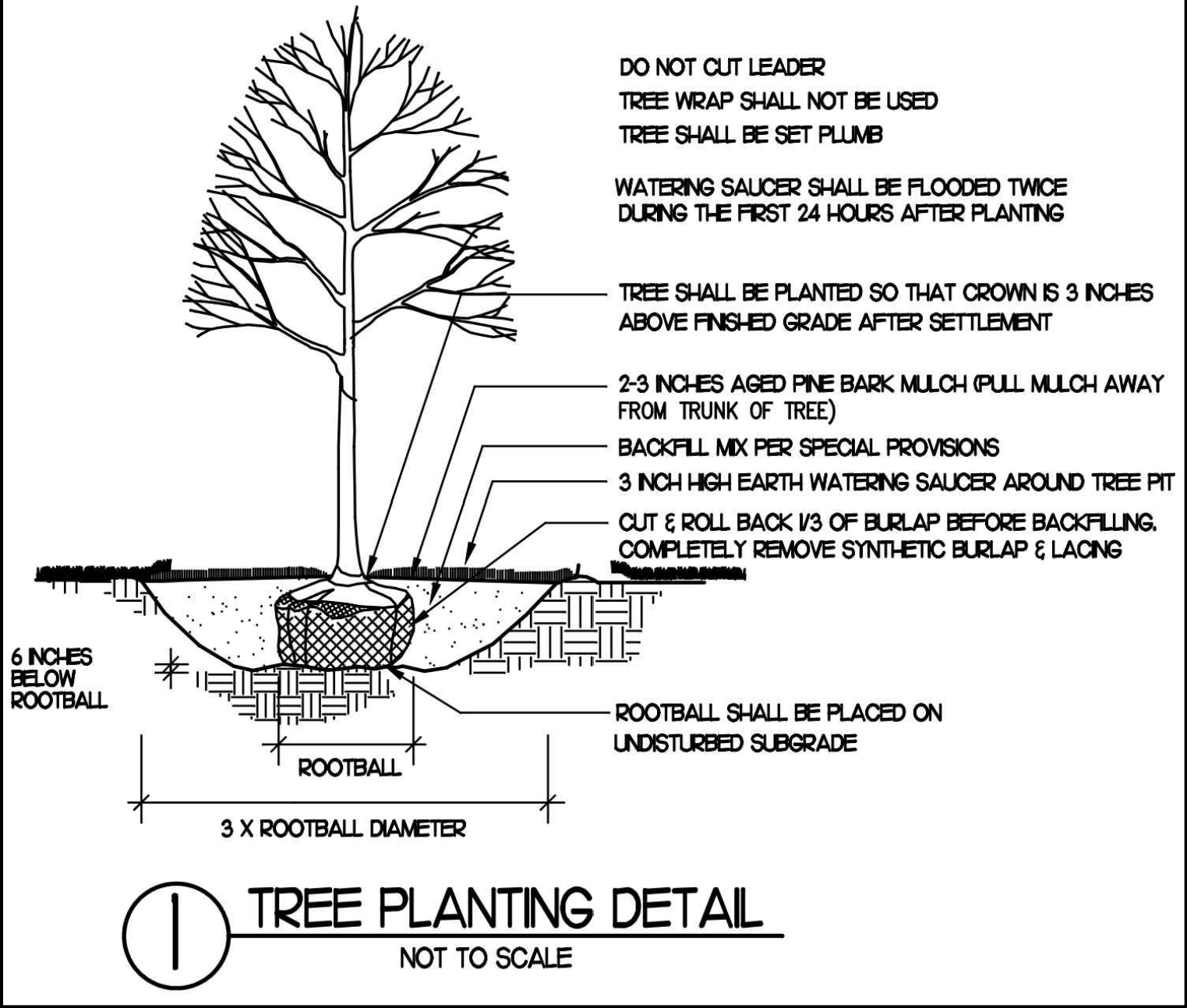
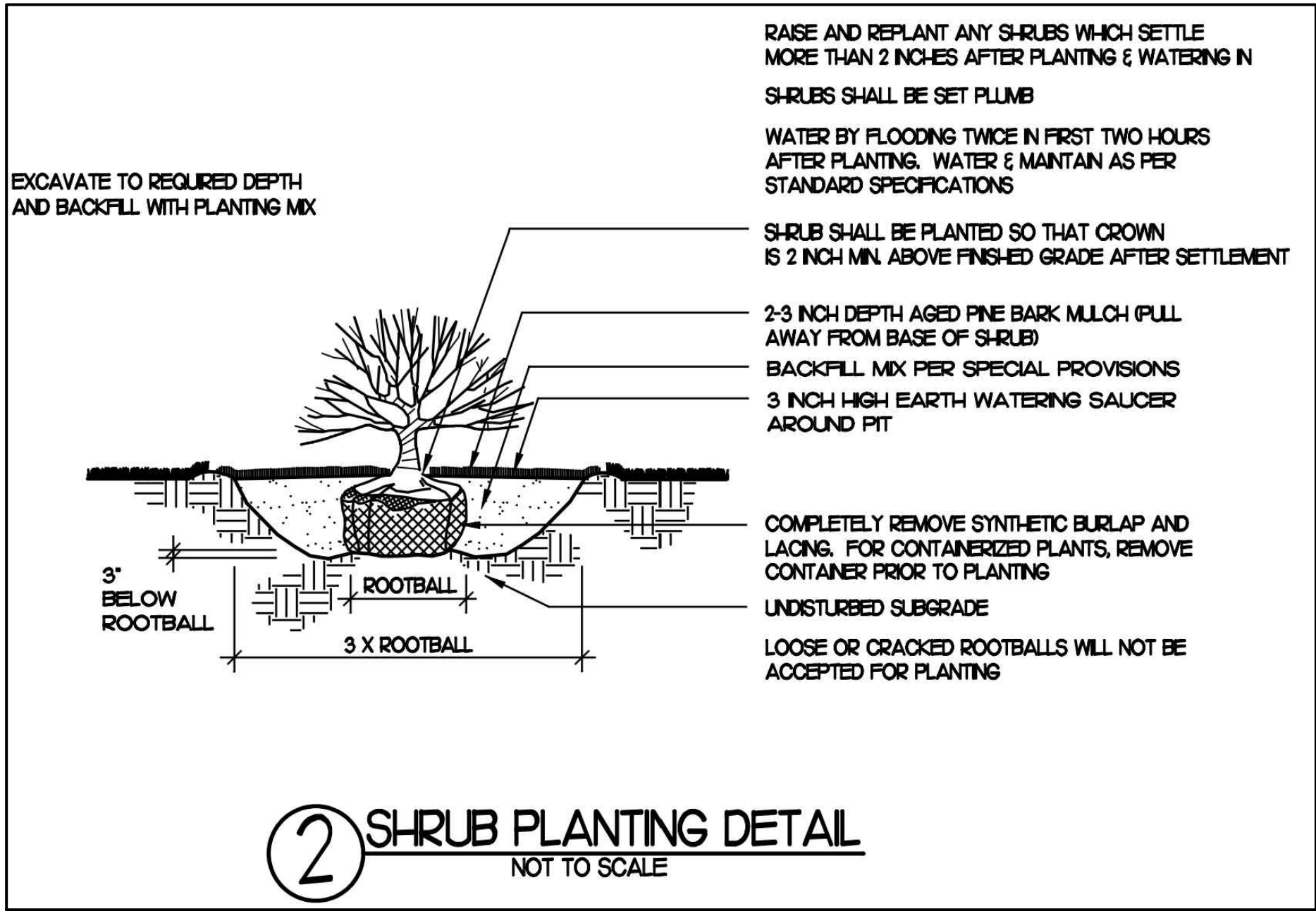


PLANT SCHEDULE: NATIVE PLANTS, AS PER NATIVE PLANT TRUST (WWW.NATIVEPLANTTRUST.ORG)

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
TREES					
AL	8	AMELANCHIER LAEVIS	SERVICEBERRY	10-12 FT MULTI-STEM	B&B/POLLINATOR/SUN-PT SHADE/DRY
AR	5	ACER RUBRUM	RED MAPLE	2"-2.5" CAL.	B&B/POLLINATOR/SUN-PT. SHADE
SHRUBS					
AU	24	ARCTOSTAPHYLOS UVA-URSI	BEARBERRY	#1 POT	POLLINATOR/SUN/DRY
DL	25	DIERVILLA LONICERA 'KODIAK'	BUSH-HONEYSUCKLE	#2 POT	POLLINATOR/SUN/DRY
CA	51	CLETHRA ANIFOLIA	SWEETSHRUB	#2 POT	SUN/SHADE/TOLERANT DRY OR WET
CO	22	CEANOTHUS AMERICANUS	NEW JERSEY TEA	#2 POT	SUN/UPLAND
CP	20	COMPTONIA PEREGRINA	SWEET FERN	#2 POT	SUN/UPLAND
IG	45	ILEX GLABRA	INKBERRY	#3 POT	POLLINATOR/SUN-PT. SHADE
JC	25	JUNIPERUS COMMUNIS 'BLUEBERRY DELIGHT'	JUNIPER	#2 POT	SUN/DRY
MP	33	MYRICA PENNSYLVANICA	BAYBERRY	#3 POT	SUN/UPLAND
PF	21	POTENTILLA FRUTICOSA	POTENTILLA	#2 POT	SUN/UPLAND
VT	32	VIBURNUM TRILOBUM	AMERICAN CRANBERRY BUSH	#3 POT	POLLINATOR/SUN-PT. SHADE
HERBACEOUS GROUND COVER MIX (PLANT 10" O.C.)					
RL	25	RUDEBECKIA LACINIATA	CONEFLOWER	2" PLUG	SHOWY FLOWERING PERENNIAL

REVISIONS:

NO	BY	DATE	DESCRIPTION
12	MB	9/08/20	REV LANDSCAPE PLAN
13	PB	7/27/21	NOI SUBMISSION
14	MB	08/31/22	NOI SUBMISSION
15	MB	10/26/22	PER REVIEW COMMENTS
16	MB	11/01/22	REV PARKING
17	MB	11/17/22	PER REVIEW COMMENTS
18	MB	01/03/23	PER REVIEW COMMENTS
19	KLE	01/12/23	REMOVE 10 SP PER CC



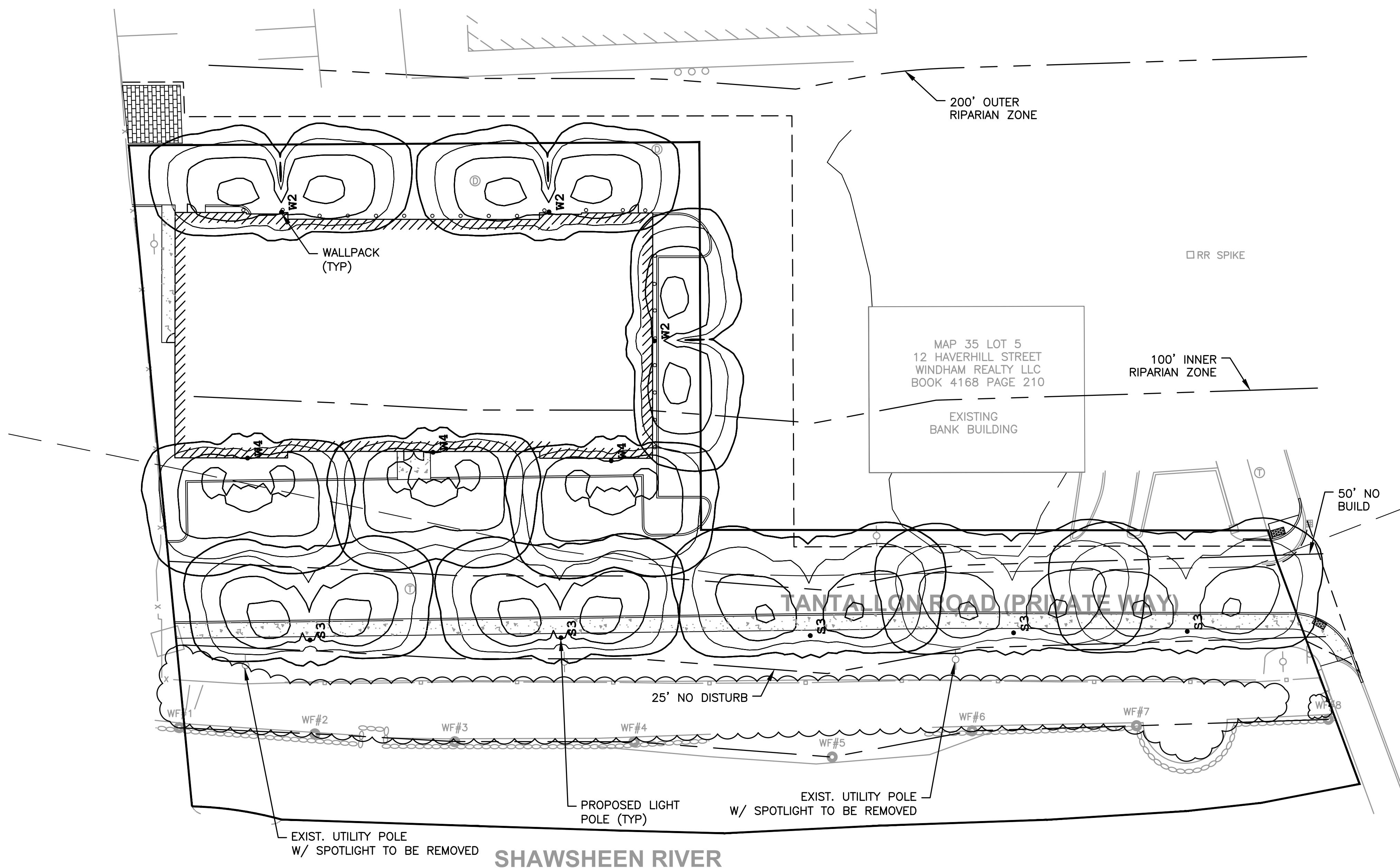
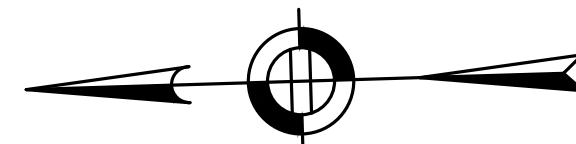
SITE PLAN

LANDSCAPE PLAN

DATE: 10-24-2017
PROJECT NUMBER: 17024
DESIGNED BY: TM
DRAWN BY: TM
CHECKED BY: KE



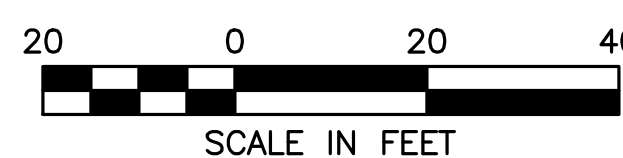
NOTE: THIS LIGHTING PLAN SHOWS PROPOSED ILLUMINATION LEVELS CALCULATED BY THE NOTED LIGHTING DESIGNER USING DATA PROVIDED BY THE NOTED LUMINAIRE MANUFACTURER. ACTUAL ILLUMINATION LEVELS IN THE FIELD MAY VARY DUE TO EQUIPMENT MANUFACTURING TOLERANCES, INSTALLATION METHODS, AND OTHER FIELD CONDITIONS. THIS LIGHTING PLAN USES A LIGHT LOSS FACTOR (LLF) OF 0.9 FOR THE PROPOSED LED LUMINAIRES IN AN EFFORT TO MODEL THE MATURE LIGHTING PROFILE OF THE LUMINAIRE. THIS LIGHTING PLAN SHOWS ONLY THE PROPOSED LOCATIONS AND TYPES OF LUMINAIRES; ASSOCIATED REQUIREMENTS SUCH AS POWER, CONDUITS, WIRING, OTHER ELECTRICAL FEATURES, AND FOUNDATIONS ARE THE RESPONSIBILITY OF OTHERS.



Symbol	Qty	Label	Arrangement	Description
⊙	5	S3	Single	SIG2-III-48VLED-NW-350-HS-PT / RNTS124-11-PT27
⊙	3	W2	Single	SIG2-II-48VLED-NW-350-HS-WM / WALL MTD 10' AFG
⊙	3	W4	Single	SIG2-IV-48VLED-NW-350-HS-WM / WALL MTD 10' AFG

StatArea 1
SOUTHERN PARKING LOT
 Illuminance (Fc)
 Average = 1.00
 Maximum = 1.8
 Minimum = 0.3
 Avg/Min Ratio = 3.33
 Max/Min Ratio = 6.00

StatArea 2
PARKING AREA WEST OF BUILDING
 Illuminance (Fc)
 Average = 1.36
 Maximum = 2.4
 Minimum = 0.5
 Avg/Min Ratio = 2.72
 Max/Min Ratio = 4.80



SOLID STATE AREA LIGHTING

SIGMA SERIES-LED

SPECIFICATIONS

HOUSING
 Heavy cast low copper aluminum assembly (A356 alloy, $\le 0.2\%$ copper). Minimum wall thickness is .188". Traditional styling of the housing provided with cast aluminum housing top hinges for easy access.

LED OPTICAL MODULE
 Low copper A356 alloy ($\le 0.2\%$ copper) cast aluminum housing, integrated clear tempered 3/16" glass lens sealed with a continuous silicone gasket protects emitters (LED's) and emitter Reflector-Prism optics, and seals the module from water intrusion and environmental contaminants. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Each emitter is optically controlled by a Reflector-Prism injection molded from H12 acrylic (3 types per module; one from 0° - 50°; one from 50° - 65°; one from 65° - 72°). Each Reflector-Prism has indexing pins for aiming and is secured to an optical plate made of matte black anodized aluminum. The optical plate locates every Reflector-Prism over an emitter. Reflector-Prisms are secured to the optical plate with a UV curing adhesive. The Reflector-Prisms are grayed to produce LES type II, III, IV, and V-SQ distributions. The entire Optical Module is field rotatable in 90° increments. Both module and drivers are factory wired using water resistant, insulated cord. Lens, module and drivers are field replaceable.

LED EMITTERS
 High Output LED's are driven at 350mA for nominal 1 Watt output each. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

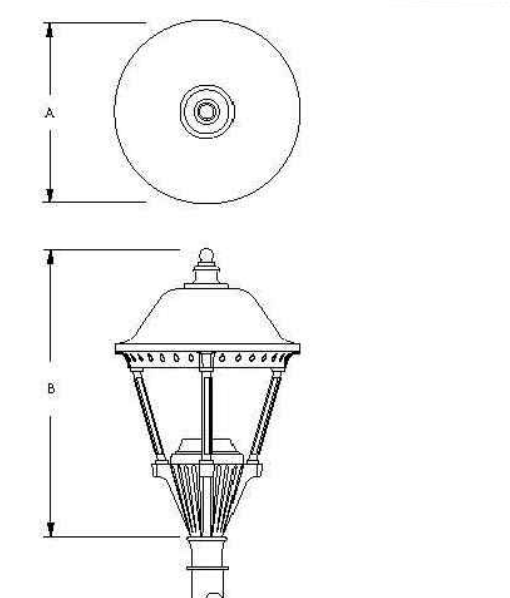
LED DRIVER
 UL and CUL recognized High Power Factor, Constant Current LED drivers operate on input voltages from 120-277VAC, 50/60Hz. Consult Factory for 347-480VAC. Driver is mechanically fastened to a retaining bracket. Main power quick disconnect provided. Driver has a minimum 4kV of internal surge protection, 10KV & 20KV Surge Protector optional. Dimming and High-Low Driver options available.

FINISH
 Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability. Texture finish is standard.

PROJECT NAME: _____
 FIXTURE TYPE: _____



SIGMA



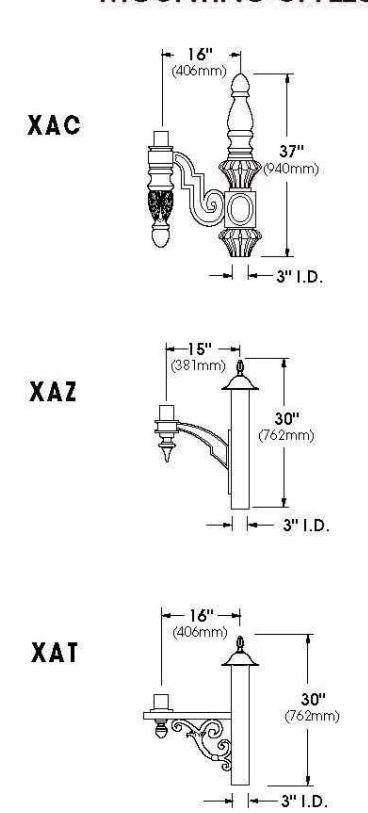
FIXTURE	A	B
SIG1	24"	37"
	650mm	940mm
SIG2	18.5"	28"
	469mm	711mm



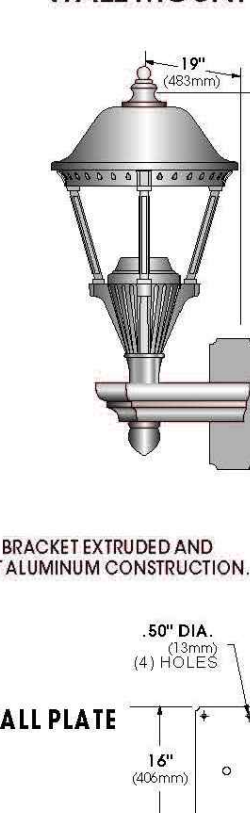
SIGMA SERIES - LED

SPECIFICATIONS

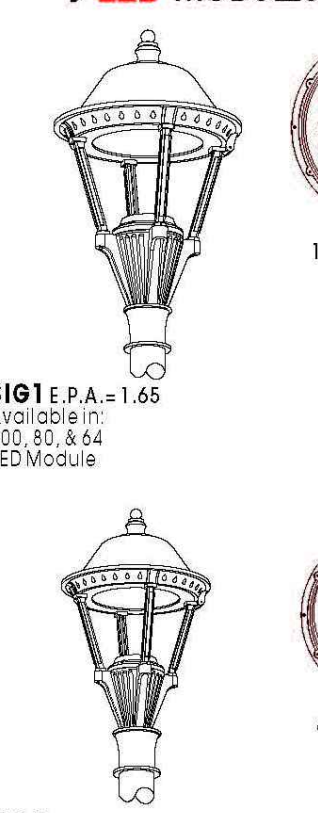
MOUNTING STYLES



WALL MOUNT



LED MODULES



ORDERING INFORMATION

LUMINAIRE	OPTICS	LED	MOUNTING	FINISH	OPTIONS
LUMINAIRE	LED DISTRIBUTION TYPE	COLOR	ARM MOUNT	STANDARD TEXTURED FINISH	INTERNAL HOUSE SIDE SHIELD - IH
<input type="checkbox"/> SIG1	<input type="checkbox"/> VLED-II (Type 4)	<input type="checkbox"/> SIG1	<input type="checkbox"/> PT	<input type="checkbox"/> BLACK RAL-9005-T	<input type="checkbox"/> EXTERNAL HOUSE SIDE SHIELD - EHS
<input type="checkbox"/> SIG2	<input type="checkbox"/> VLED-III (Type 4)	<input type="checkbox"/> SIG2	<input type="checkbox"/> 2-180	<input type="checkbox"/> WHITE RAL-9003-T	<input type="checkbox"/> DIMMABLE DRIVER (D100)
	<input type="checkbox"/> VLED-IV (Type 4)	<input type="checkbox"/> SIG2	<input type="checkbox"/> 2-90	<input type="checkbox"/> GREY RAL-7004-T	<input type="checkbox"/> HIGH-CW DRAWING FOR HARDWARE DRAWING OR NON-REGISTERED ACTION SENSOR
	<input type="checkbox"/> VLED-VSQ (Type 4)	<input type="checkbox"/> SIG2	<input type="checkbox"/> 3-120	<input type="checkbox"/> DARK BRONZE RAL-8019-T	<input type="checkbox"/> PHOTO CELL VOLTAGE (EXAMPLE: PCS20) ... PC-V
			<input type="checkbox"/> 4-90	<input type="checkbox"/> GREEN RAL-6005-T	<input type="checkbox"/> 10KV SURGE PROTECTOR
			<input type="checkbox"/> WALL MOUNT	<input type="checkbox"/> FOR SMOOTH FINISH REMOVE SUFFIX 'T' (EXAMPLE: RAL-9003)	<input type="checkbox"/> 20KV SURGE PROTECTOR (20KV & 48KV ONLY) ... 20SP

Sun Valley Lighting | 40 West Avenue O, Rahway, NJ 07065 | Phone: (908) 333-2000 | Fax: (908) 333-2001 | www.svalley.com

HOWARD STEIN HUDSON
 114 Turnpike Road, Suite 2C
 Chelmsford, MA 01824
 www.hshassoc.com

PREPARED FOR:
 Neil Rosenberg
 7 Tantaloon Road
 Andover, MA 01810

THE TANTALLON
 PROPOSED MULTIFAMILY
 REDEVELOPMENT PROJECT
 7 TANTALLON ROAD
 ANDOVER, MA, 01810

REVISIONS:

NO	BY	DATE	DESCRIPTION
12	MB	9/08/20	REV LANDSCAPE PLAN
13	PB	7/27/21	NOI SUBMISSION
14	MB	08/31/22	NOI SUBMISSION
15	MB	10/26/22	PER REVIEW COMMENTS
16	MB	11/01/22	REV PARKING
17	MB	11/17/22	PER REVIEW COMMENTS
18	MB	01/03/23	PER REVIEW COMMENTS
19	KLE	01/12/23	REMOVE 10 SP PER CC

SITE PLAN

LIGHTING PLAN

DATE: 10-24-2017

PROJECT NUMBER: 17024

DESIGNED BY: TM

DRAWN BY: TM

CHECKED BY: KE



HOWARD STEIN HUDSON
 114 Turnpike Road, Suite 2C
 Chelmsford, MA 01824
 www.hshassoc.com

PREPARED FOR:
 Neil Rosenberg
 7 Tantalion Road
 Andover, MA 01810

**THE TANTALLON
 PROPOSED MULTIFAMILY
 REDEVELOPMENT PROJECT
 7 TANTALLON ROAD
 ANDOVER, MA, 01810**

REVISIONS:

NO	BY	DATE	DESCRIPTION
12	MB	9/08/20	REV LANDSCAPE PLAN
13	PB	7/27/21	NOI SUBMISSION
14	MB	08/31/22	NOI SUBMISSION
15	MB	10/26/22	PER REVIEW COMMENTS
16	MB	11/01/22	REV PARKING
17	MB	11/17/22	PER REVIEW COMMENTS
18	MB	01/03/23	PER REVIEW COMMENTS
19	KLE	01/12/23	REMOVE 10 SP PER CC



SITE PLAN

DETAIL SHEET
 2 OF 4

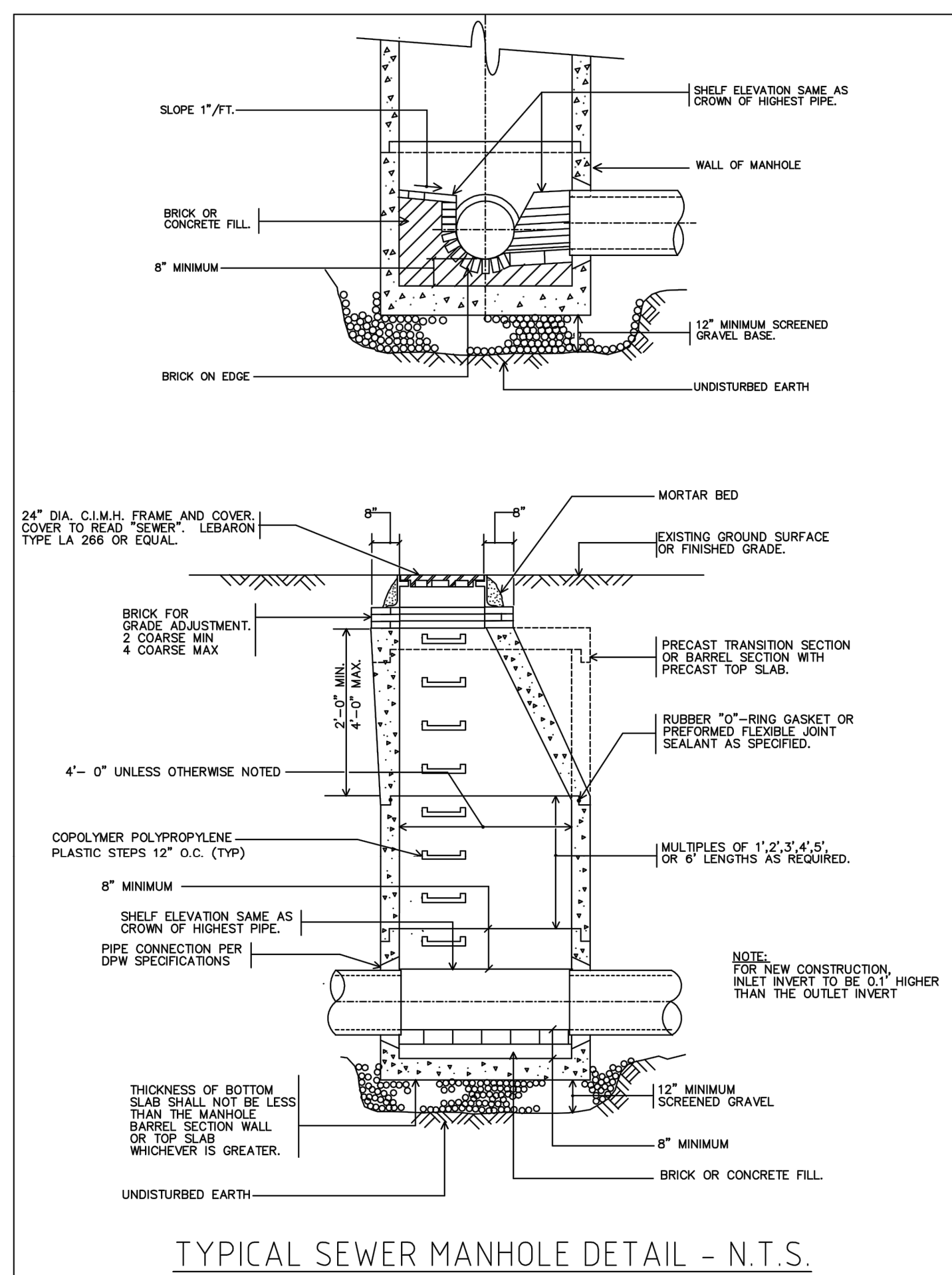
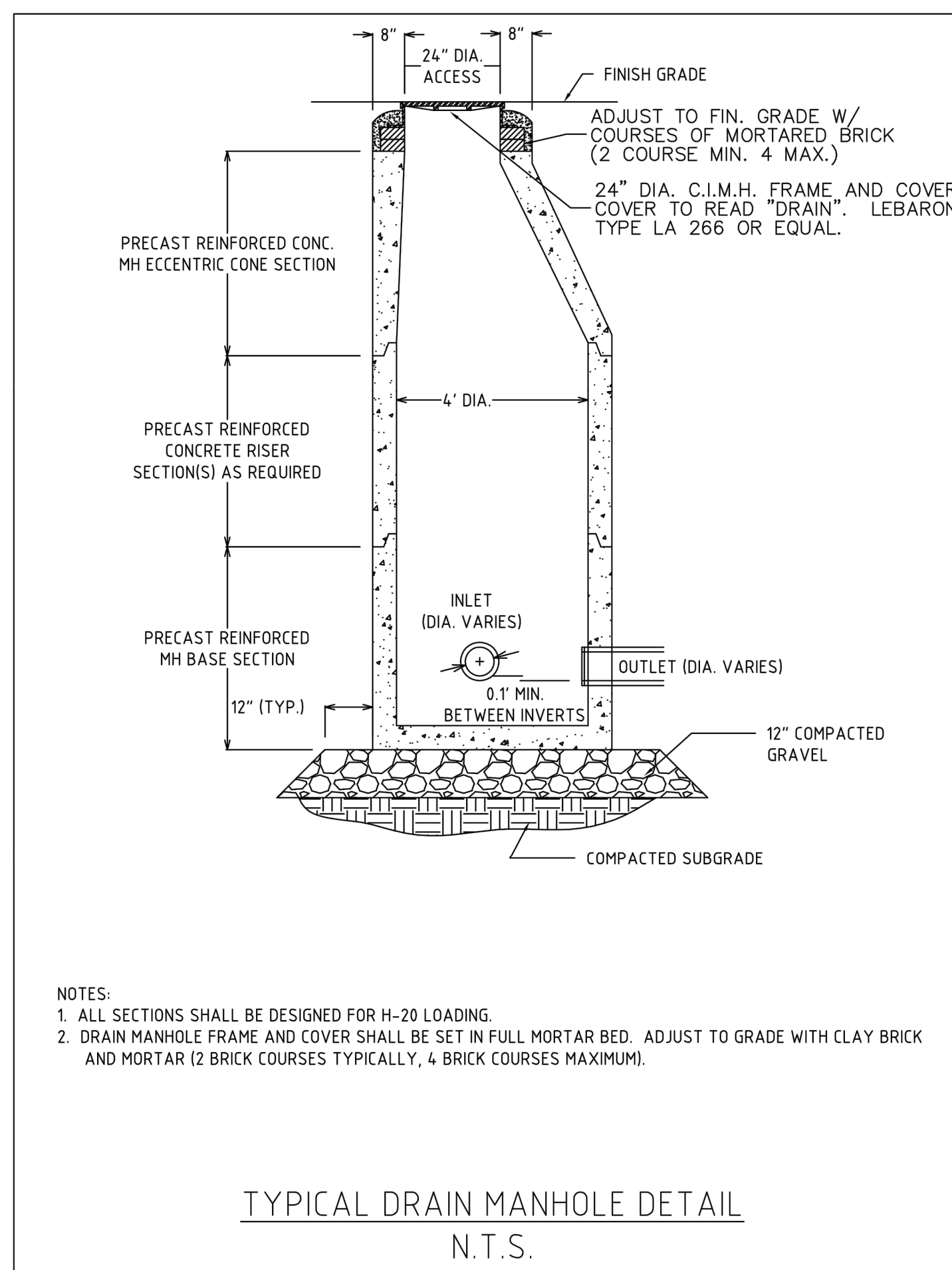
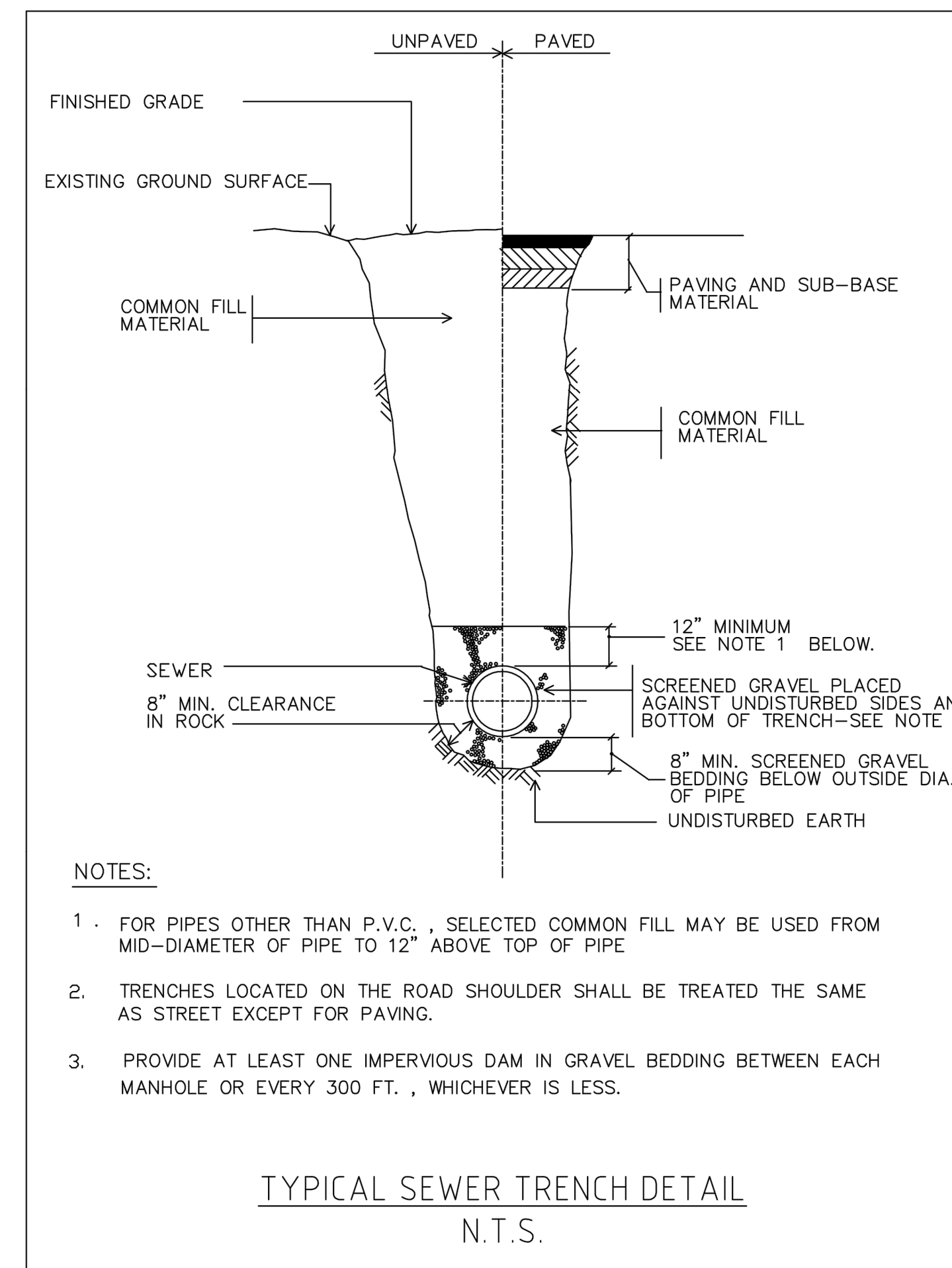
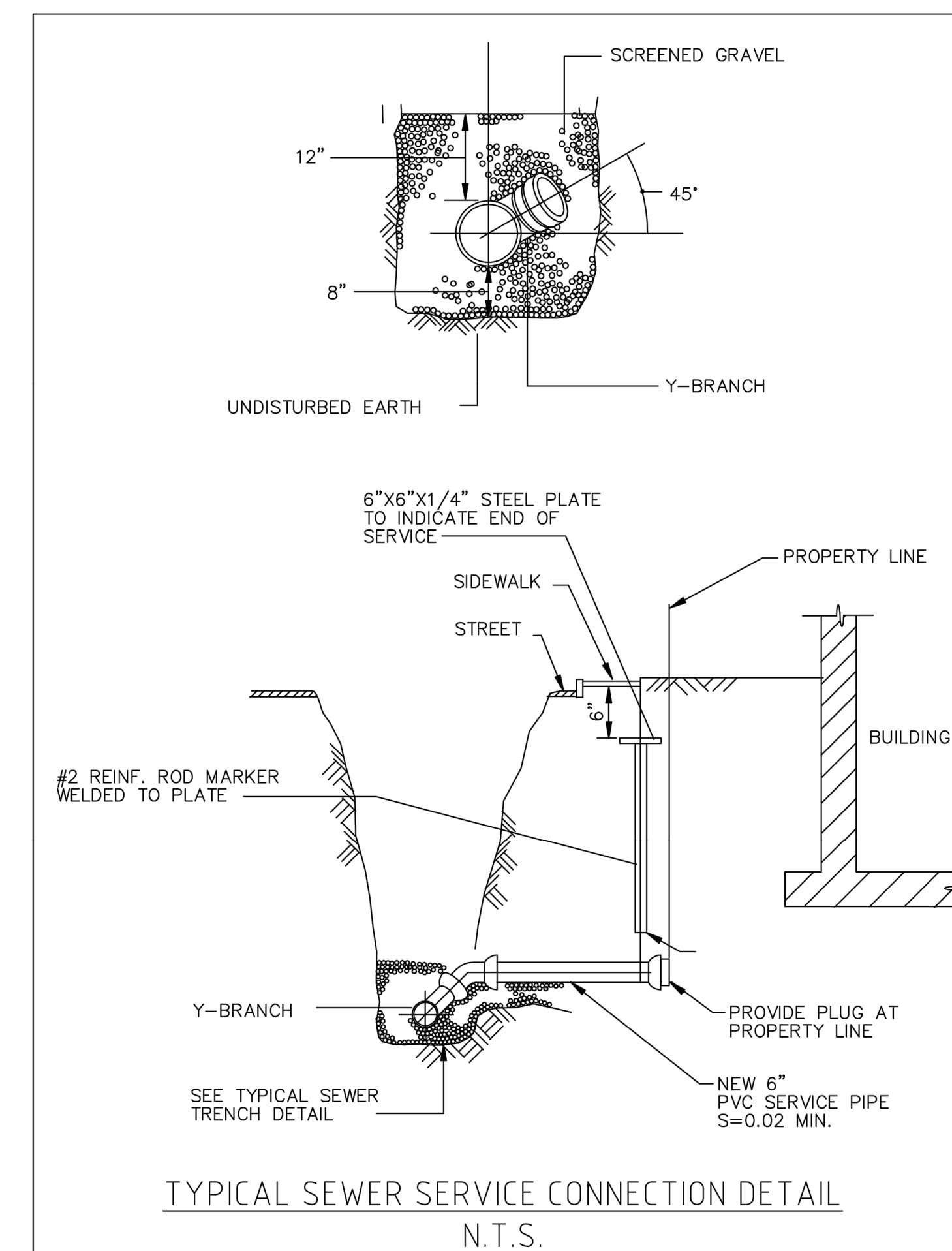
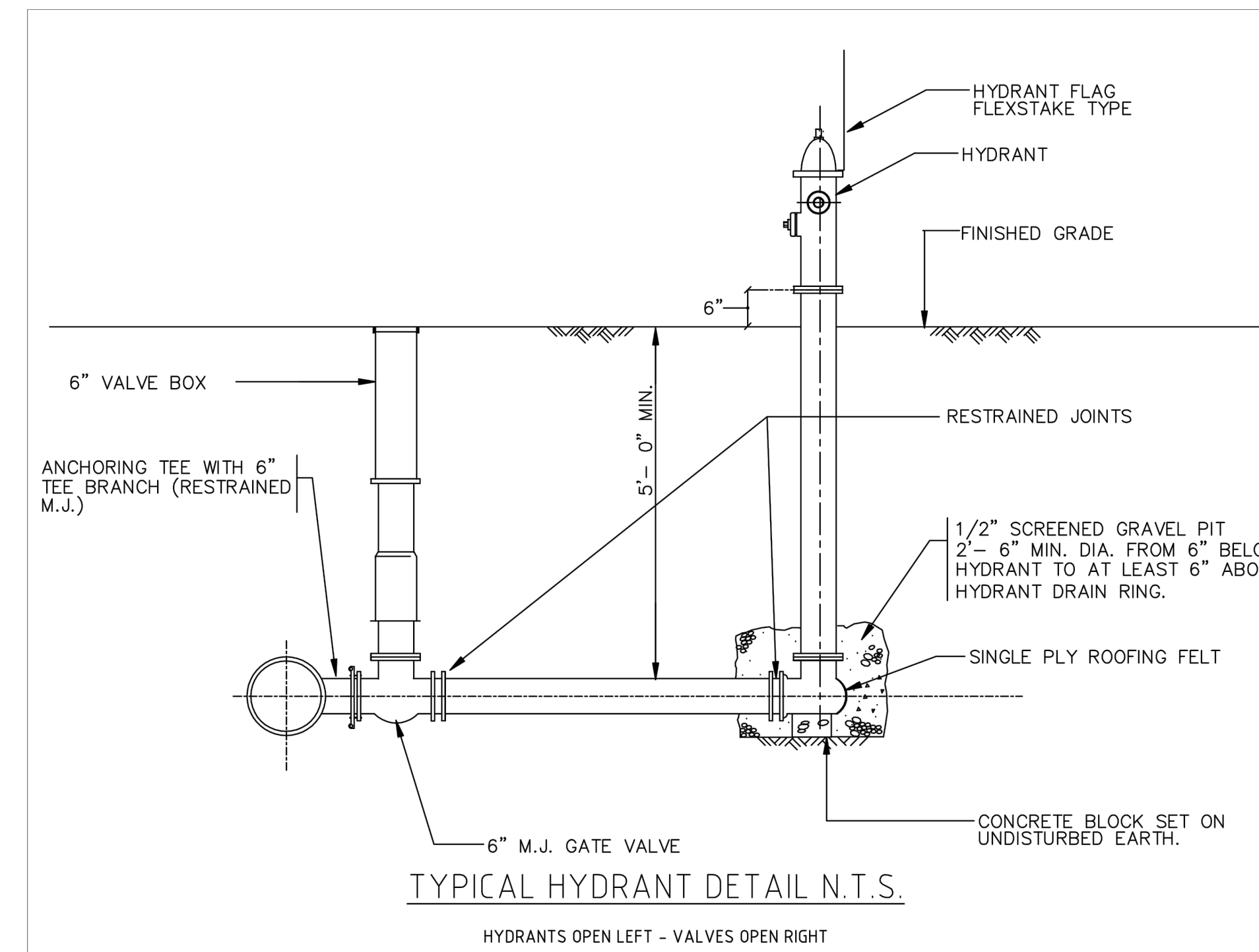
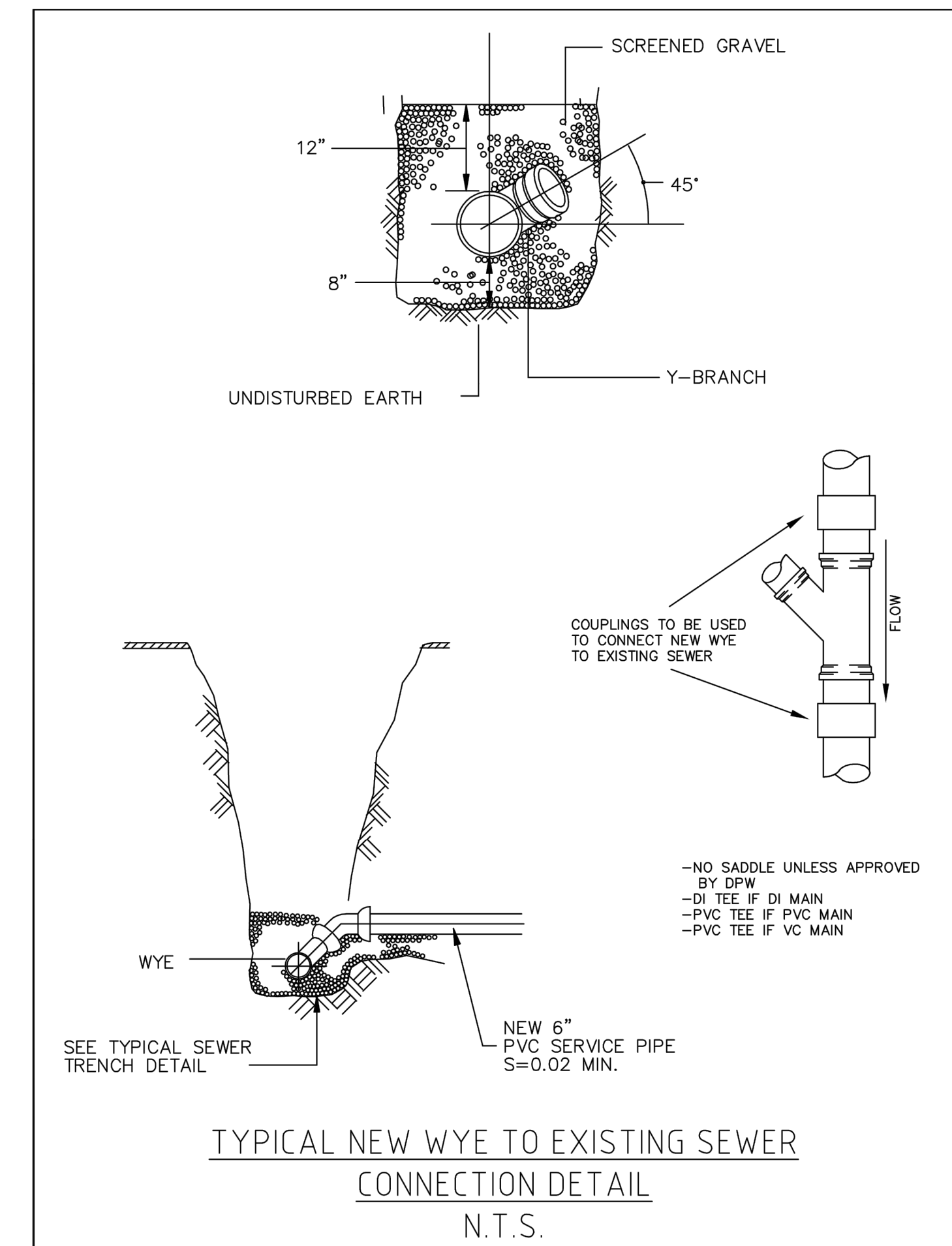
DATE: 10-24-2017

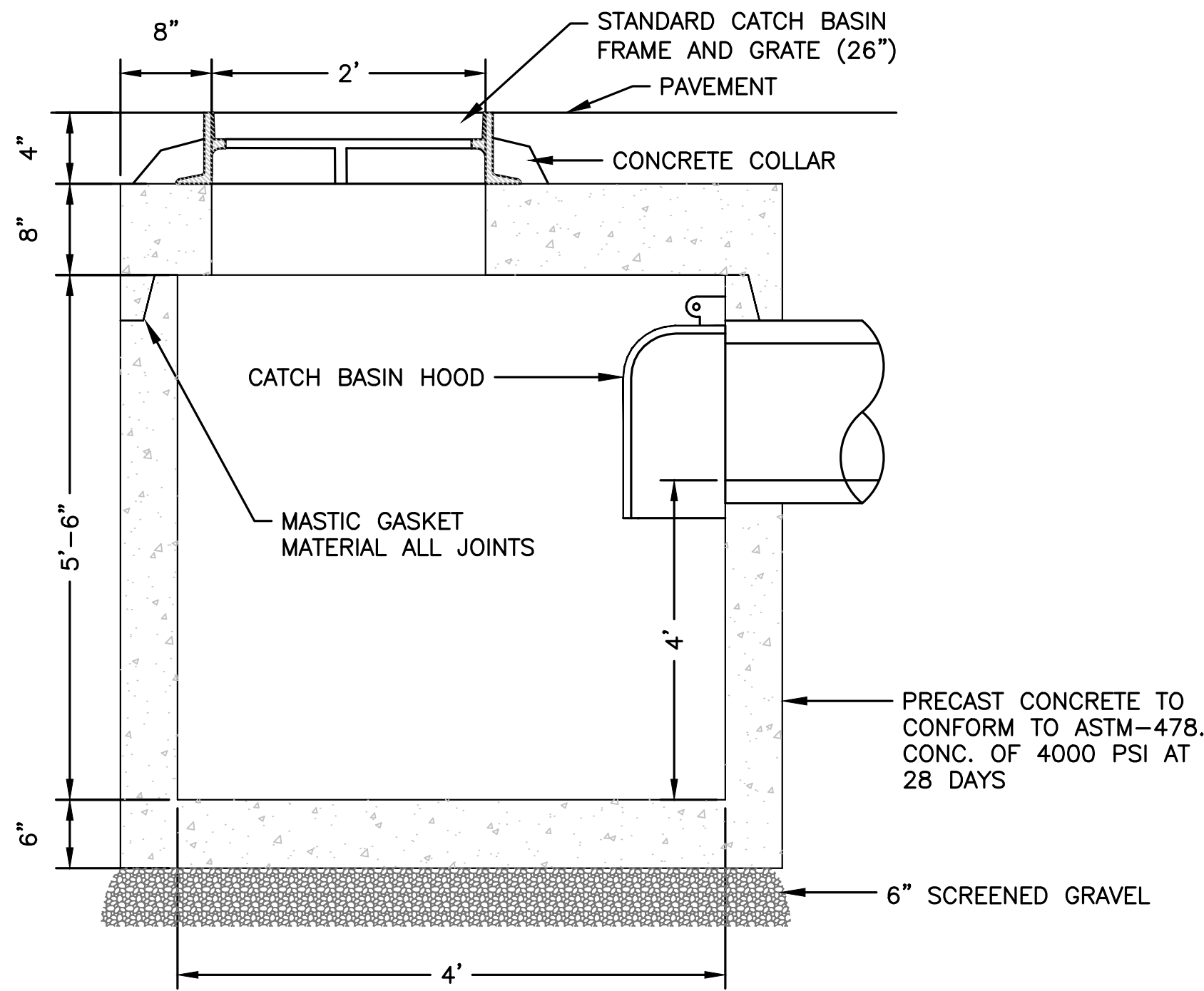
PROJECT NUMBER: 17024

DESIGNED BY: TM

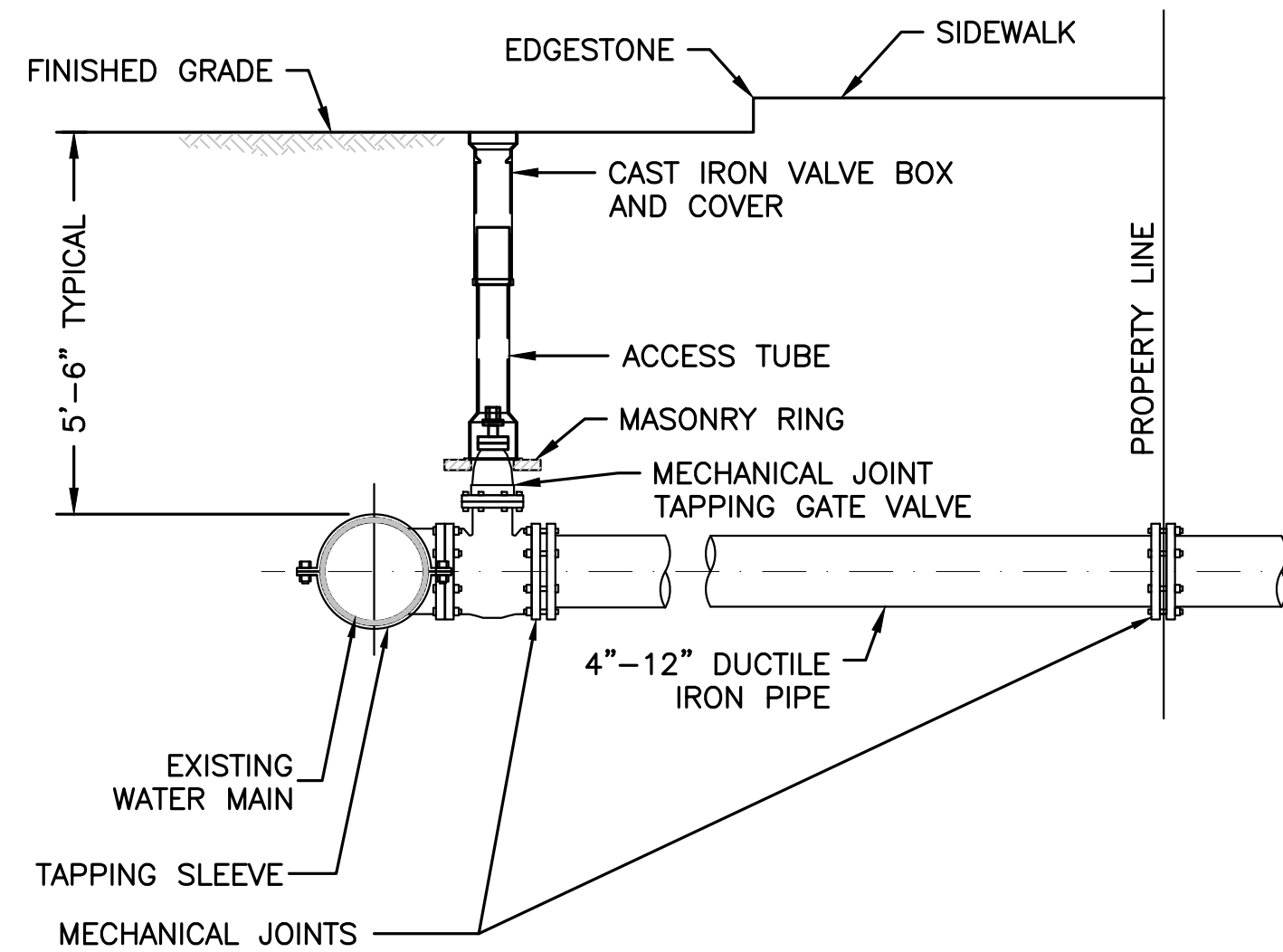
DRAWN BY: TM

CHECKED BY: KE





SHALLOW CATCH BASIN DETAIL
NOT TO SCALE



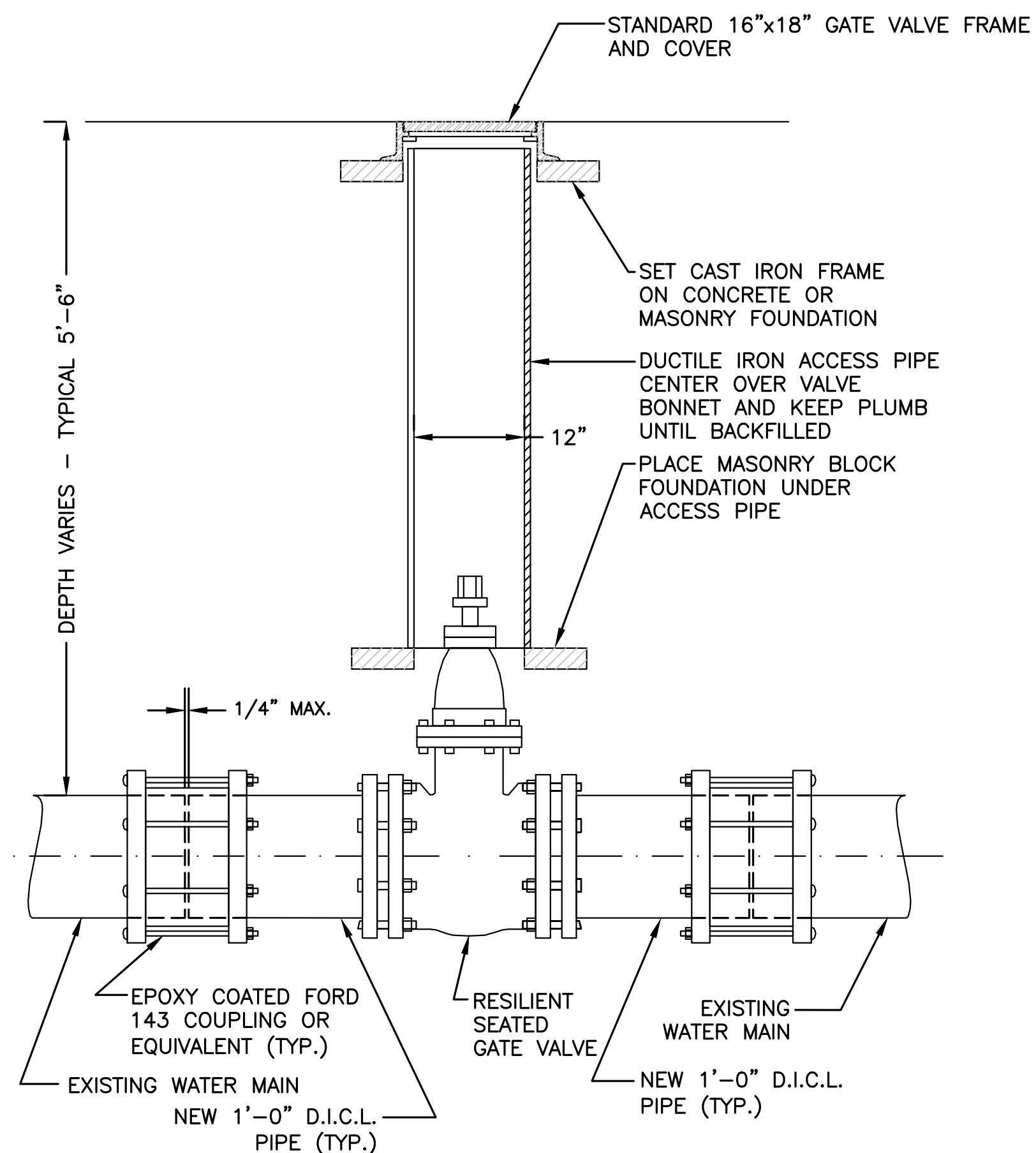
NOTES:

1. CONCRETE THRUST BLOCK TO BE USED ONLY WHERE IT WILL BEAR ON UNDISTURBED EARTH.
2. USE RESTRAINED JOINT FITTINGS OR TIE RODS WHERE CONCRETE THRUST BLOCK IS UNACCEPTABLE.
3. SIZE OF BLOCK OR MEGALUG TO BE DESIGNED FOR SPECIFIC CONDITIONS.

TAPPING SLEEVE & VALVE
NOT TO SCALE



FLOOD SIGNAGE
NOT TO SCALE



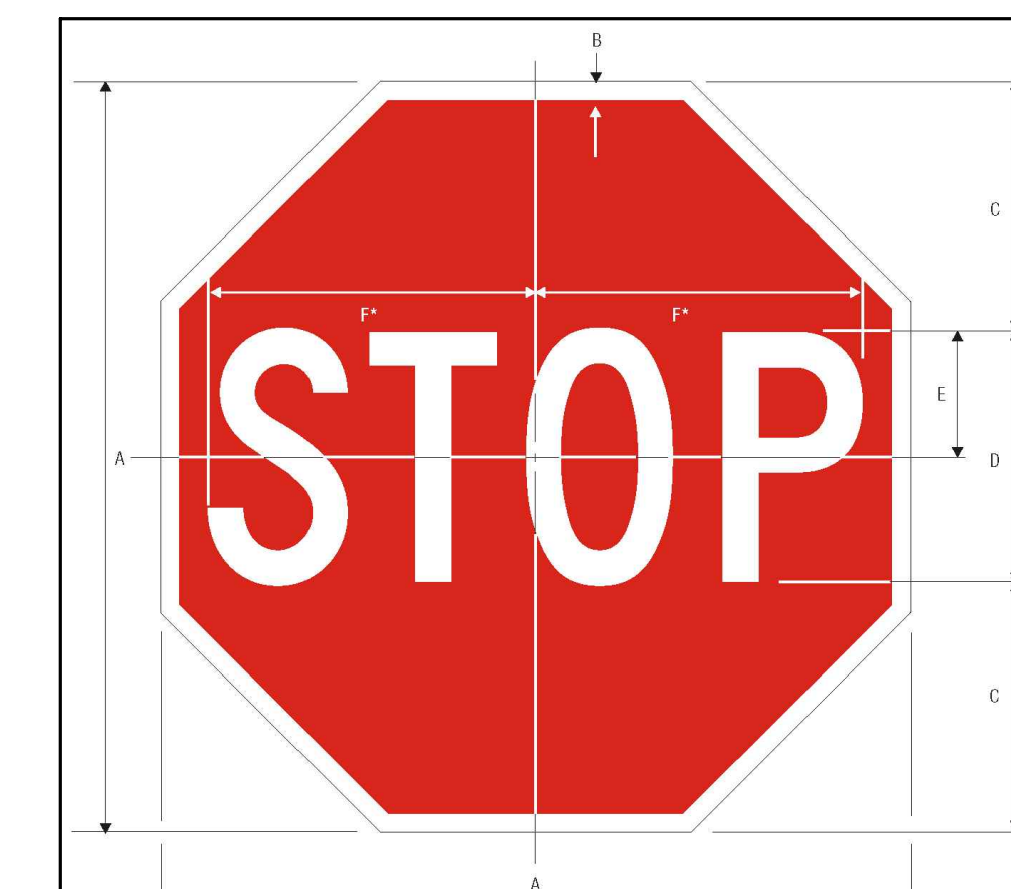
NOTE:

1. ALL EXCAVATION AND BACKFILLING AND PAVING SHALL BE IN ACCORDANCE WITH THE CITY OF BOSTON REQUIREMENTS.

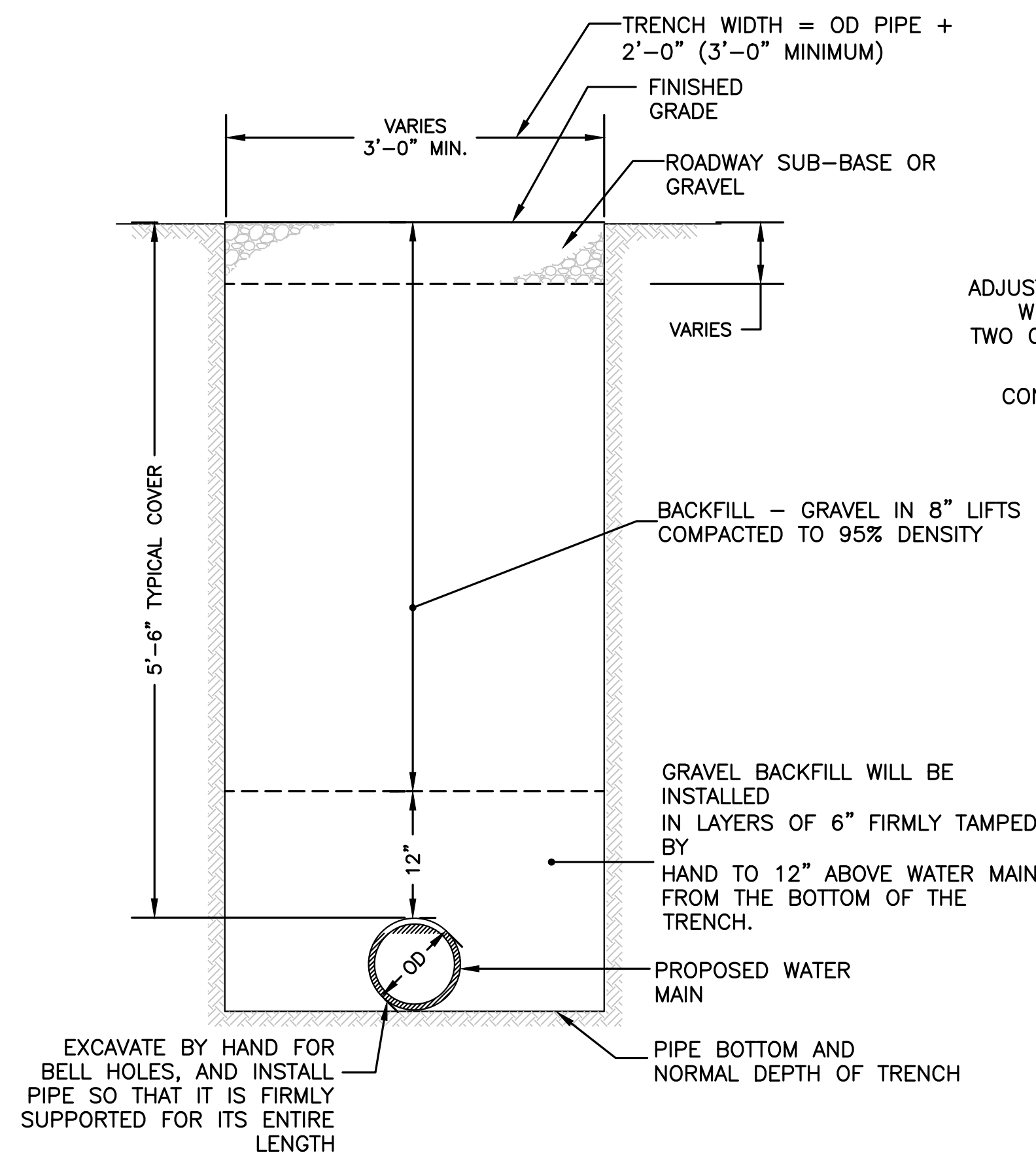
TYPICAL GATE VALVE INSTALLATION
NOT TO SCALE



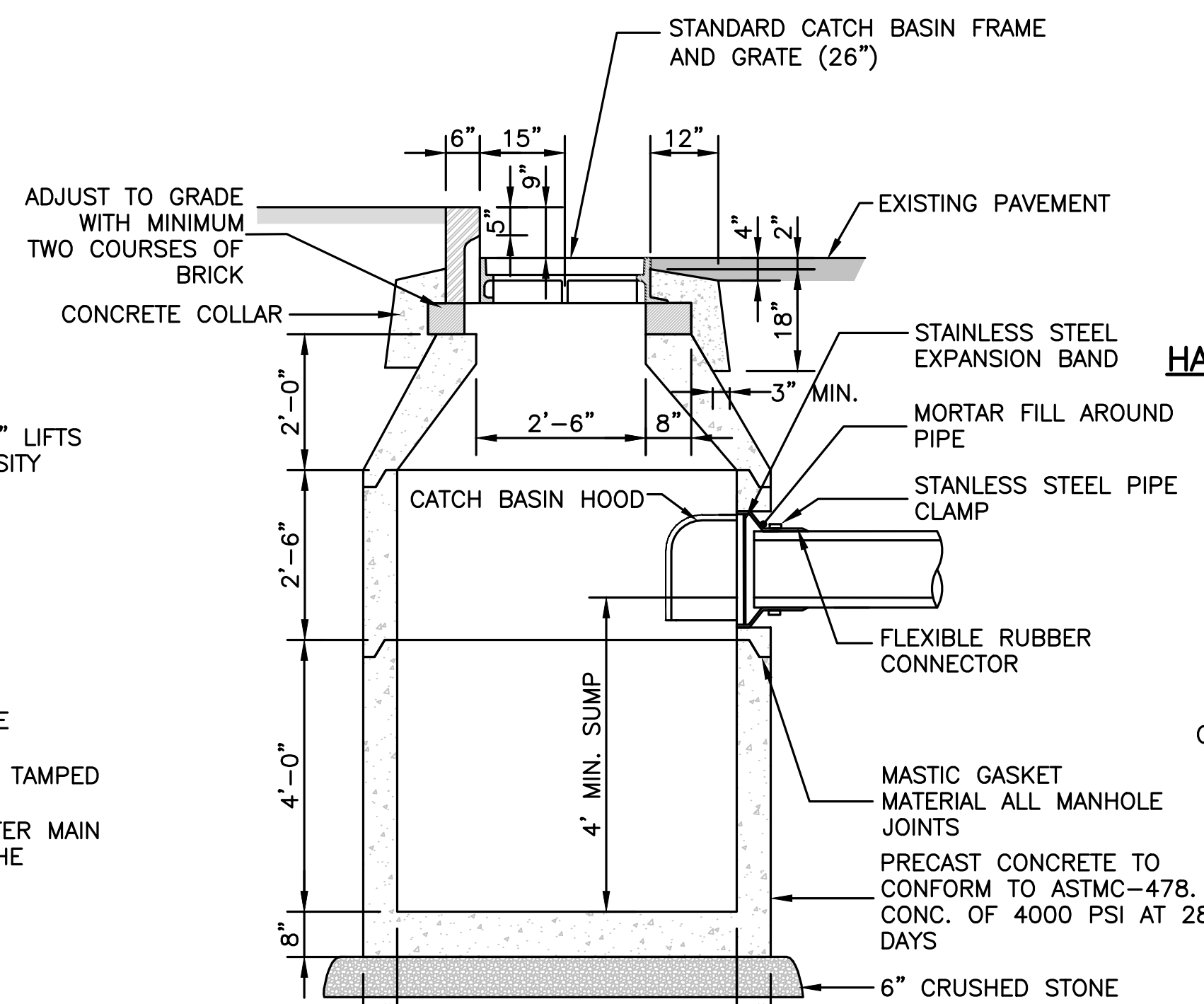
HANDICAP & VAN ACCESSIBLE SIGNS DETAIL
NOT TO SCALE



STOP SIGN R1-1 DETAIL
NOT TO SCALE



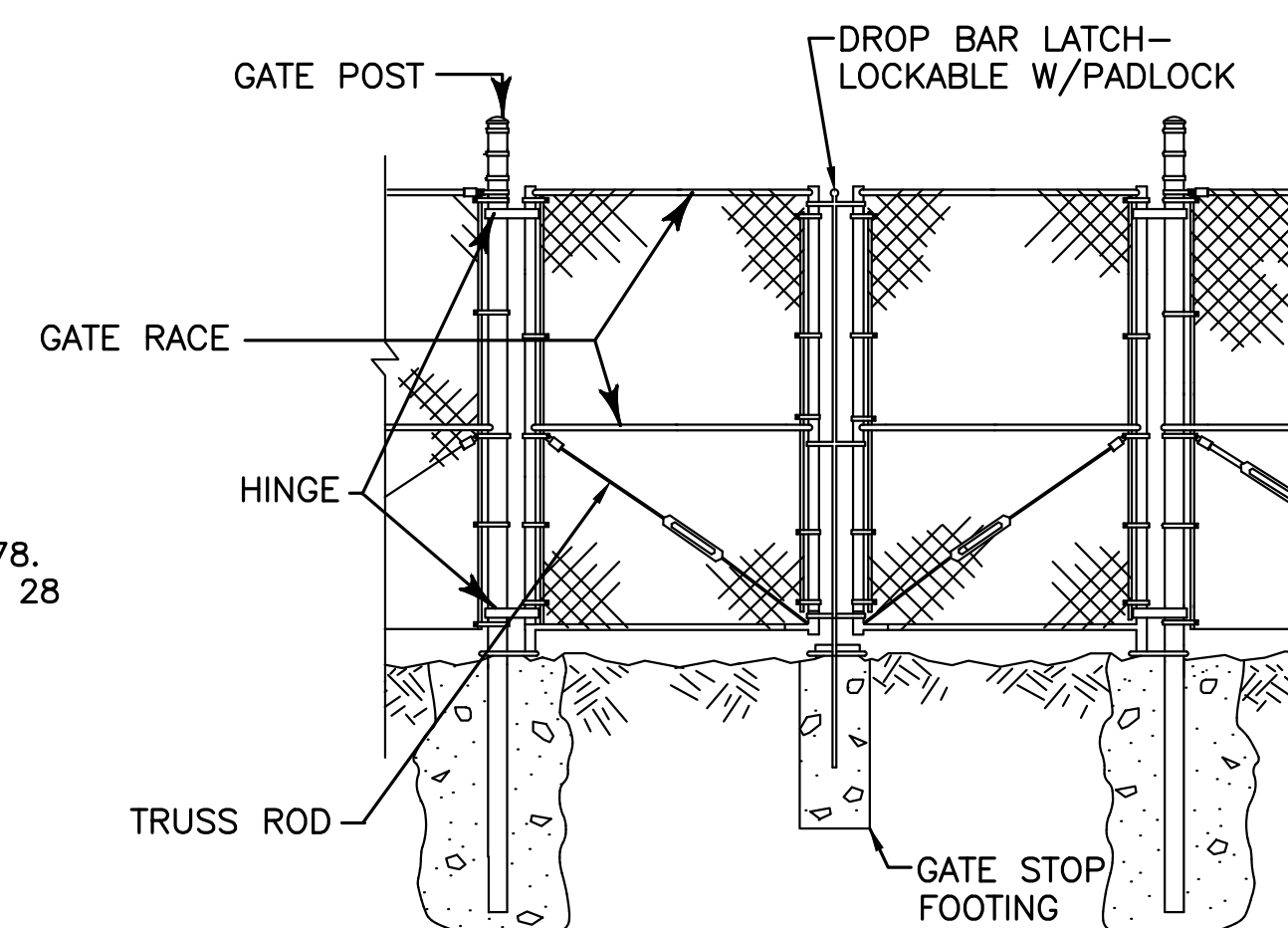
TRENCH DETAIL - WATER MAIN
NOT TO SCALE



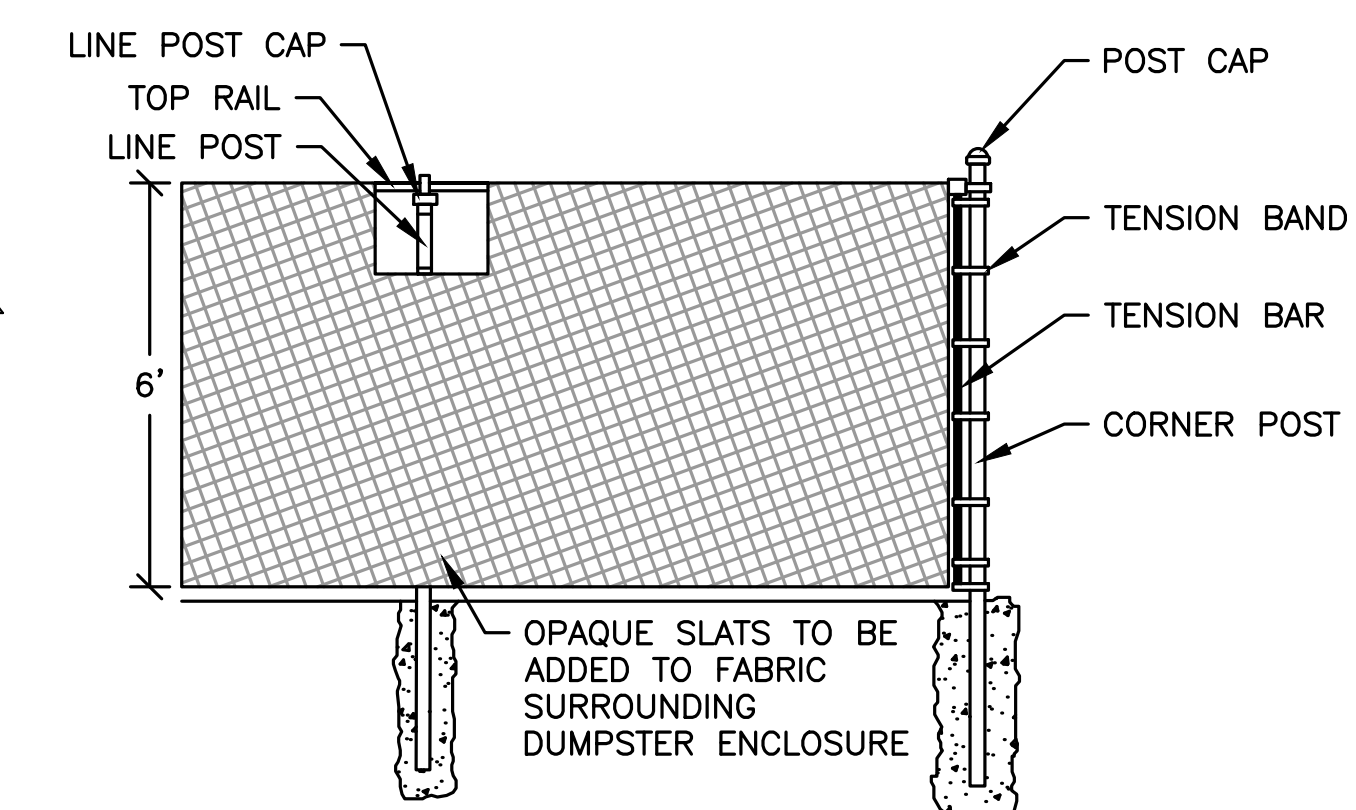
NOTES:

1. ADEQUATE FOR H-20 MINIMUM LOADING.

CATCH BASIN
NOT TO SCALE



CHAIN LINK FENCE DETAIL
NOT TO SCALE



PREPARED FOR:
Neil Rosenberg
7 Tantalton Road
Andover, MA 01810

**THE TANTALLON
PROPOSED MULTIFAMILY
REDEVELOPMENT PROJECT
7 TANTALLON ROAD
ANDOVER, MA, 01810**

REVISIONS:

NO	BY	DATE	DESCRIPTION
12	MB	9/08/20	REV LANDSCAPE PLAN
13	PB	7/27/21	NOI SUBMISSION
14	MB	08/31/22	NOI SUBMISSION
15	MB	10/26/22	PER REVIEW COMMENTS
16	MB	11/01/22	REV PARKING
17	MB	11/17/22	PER REVIEW COMMENTS
18	MB	01/03/23	PER REVIEW COMMENTS
19	KLE	01/12/23	REMOVE 10 SP PER CC



SITE PLAN

DETAIL SHEET
3 OF 4

DATE: 10-24-2017

PROJECT NUMBER: 17024

DESIGNED BY: TM

DRAWN BY: TM

CHECKED BY: KE



HOWARD STEIN HUDSON
 114 Turnpike Road, Suite 2C
 Chelmsford, MA 01824
 www.hshassoc.com

PREPARED FOR:
 Neil Rosenberg
 7 Tantalum Road
 Andover, MA 01810

**THE TANTALLON
 PROPOSED MULTIFAMILY
 REDEVELOPMENT PROJECT
 7 TANTALLON ROAD
 ANDOVER, MA, 01810**

REVISIONS:

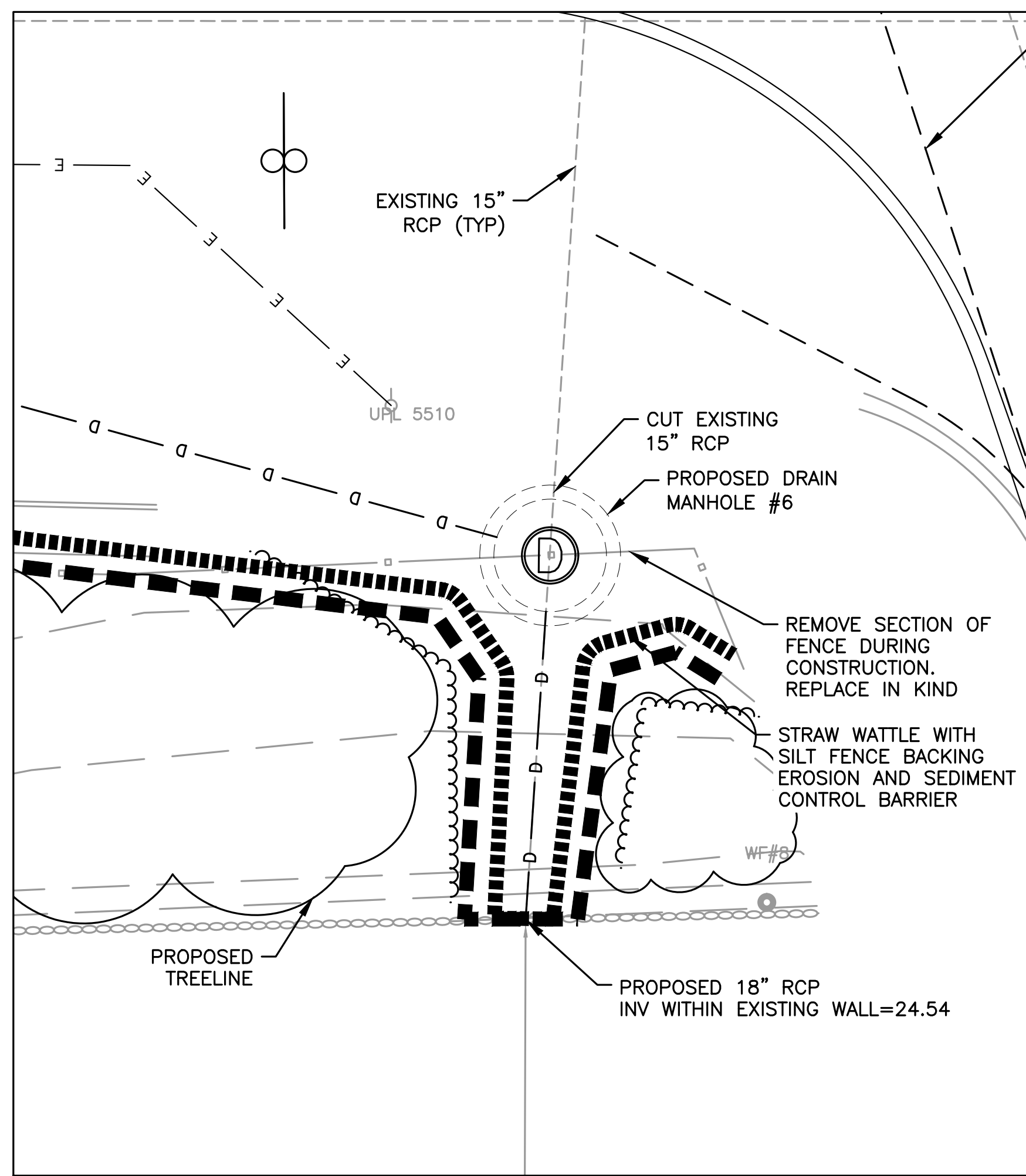
NO	BY	DATE	DESCRIPTION
12	MB	9/08/20	REV LANDSCAPE PLAN
13	PB	7/27/21	NOI SUBMISSION
14	MB	08/31/22	NOI SUBMISSION
15	MB	10/26/22	PER REVIEW COMMENTS
16	MB	11/01/22	REV PARKING
17	MB	11/17/22	PER REVIEW COMMENTS
18	MB	01/03/23	PER REVIEW COMMENTS
19	KLE	01/12/23	REMOVE 10 SP PER CC



SITE
 PLAN

DETAIL
 SHEET
 4 OF 4

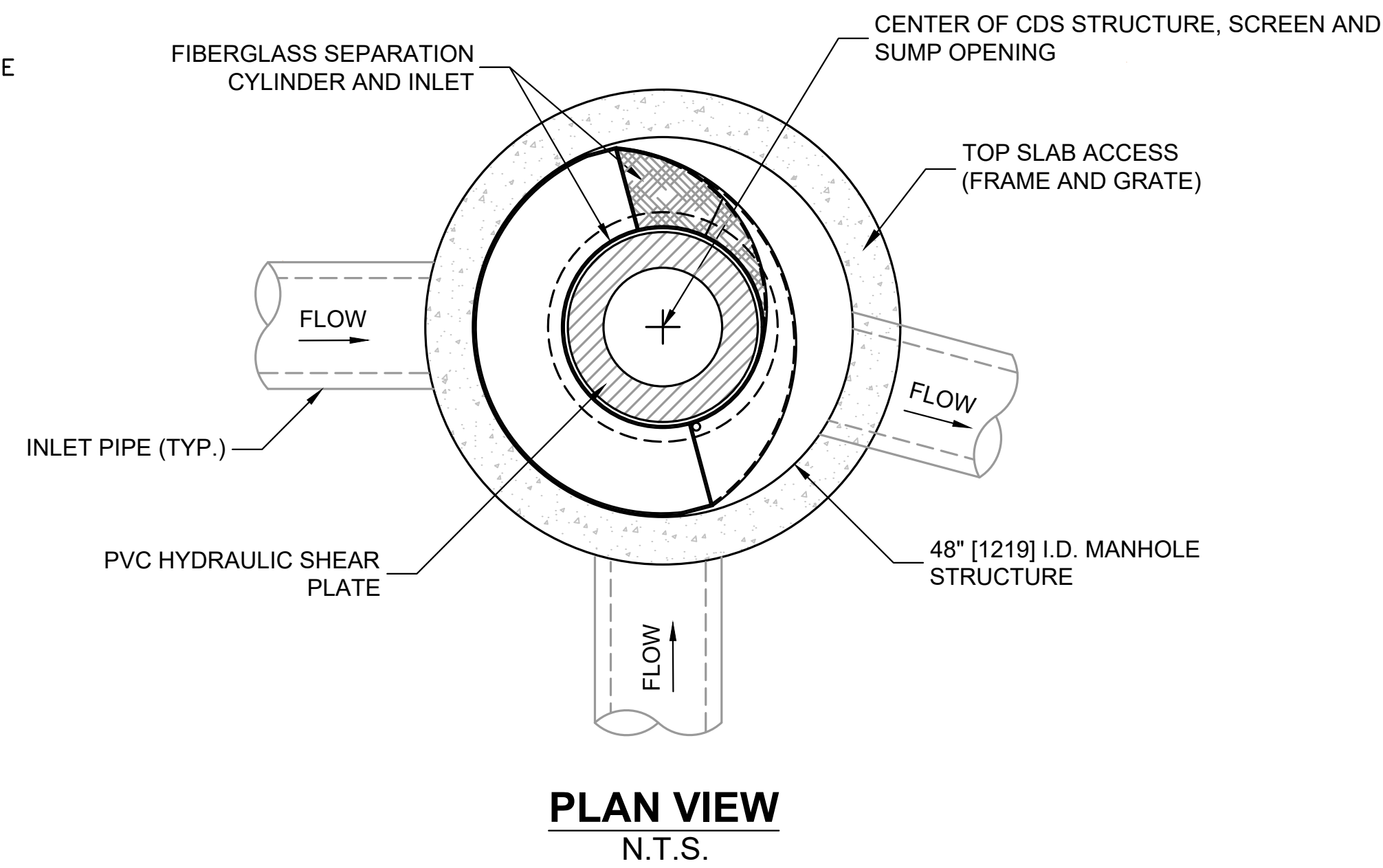
DATE:	10-24-2017
PROJECT NUMBER:	17024
DESIGNED BY:	TM
DRAWN BY:	TM
CHECKED BY:	KE



OUTLET REPLACEMENT DETAIL
 SCALE 1"=4'

INSTALLATION NOTES

1. PLACE EROSION CONTROLS, BOTH STRAW WATTLE AND SILT FENCE AT LIMIT OF WORK.
2. REMOVE STONES PLACED AT OUTLET BY HAND. PLACE STONES ADJACENT TO PIPE INSTALLATION FOR REUSE.
3. EXCAVATE PIPE AND CUT TO INSTALL NEW DRAINAGE MANHOLE.
4. INSTALL NEW DRAINAGE MANHOLE #6.
5. INSTALL NEW 18" RCP MAINTAINING THE SAME INVERT ELEVATION.
6. PLACE STONES AND ROCKS AROUND PIPE AND CAP IN KIND TO EXISTING WALL.
7. TO SECURE SLOPE LOAM AND SEED EXPOSED SOILS, INSTALL BIODEGRADABLE EROSION CONTROL BLANKET, PLANT SHRUBS PER LANDSCAPE PLAN.
8. LEAVE EROSION CONTROLS IN PLACE UNTIL ALL VEGETATION IS STABILIZED.

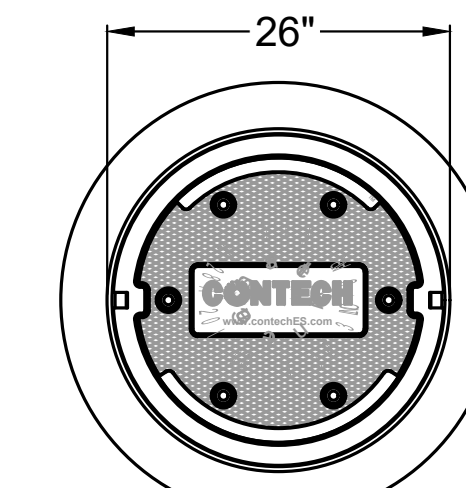
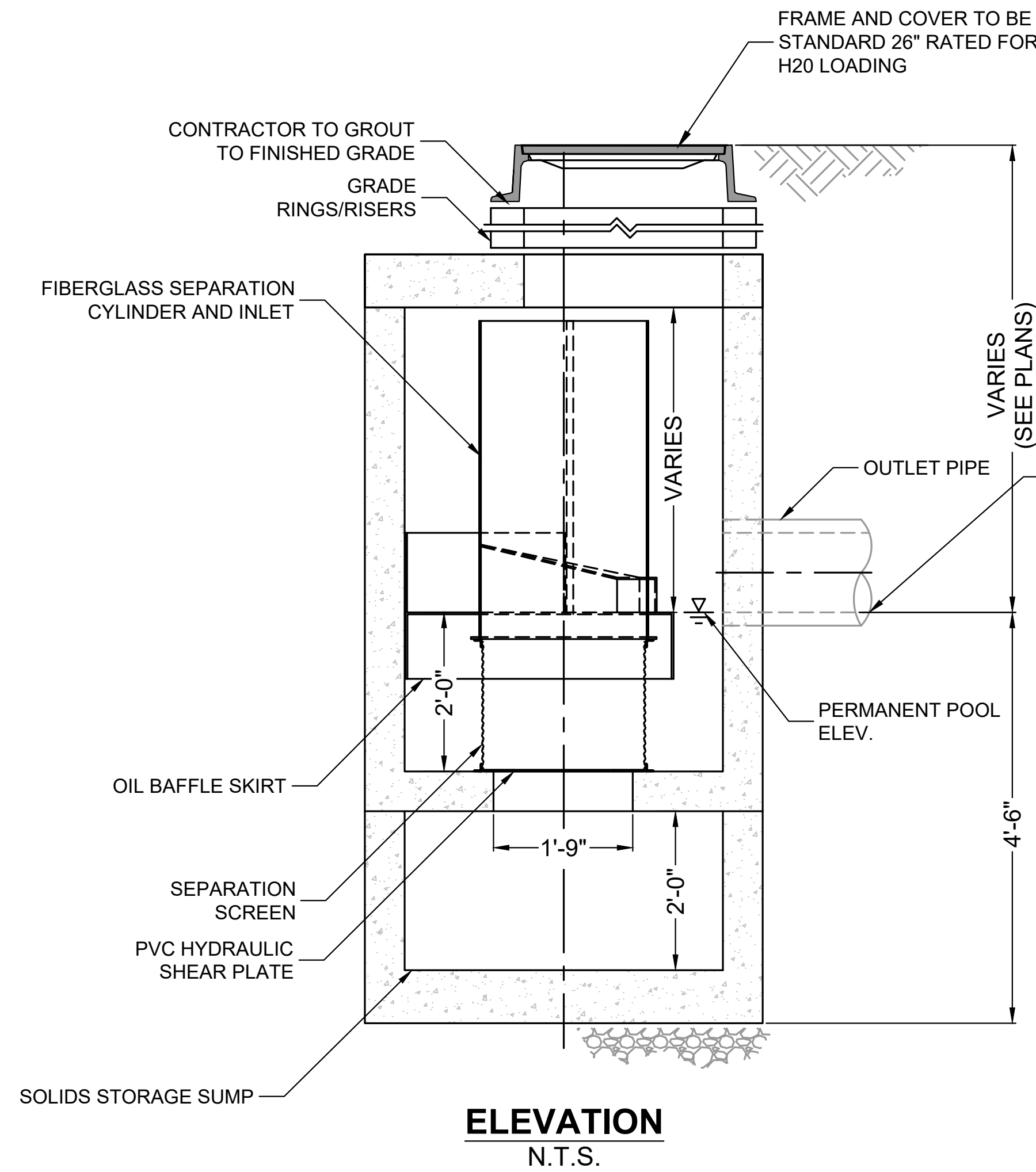


GENERAL NOTES

1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO H520 LOAD RATING, ASSUMING EARTH COVER OF 0'-2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES

- A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
- C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
- E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



FRAME AND COVER
 N.T.S.
 (PROVIDED BY CONTECH)

DRAIN MANHOLE #6
CONTECH CDS 2015-4 WATER QUALITY UNIT
 NOT TO SCALE
 *DETAIL PROVIDED BY CONTECH