

GENERAL NOTES

1. THE LOCATIONS OF EXISTING AND SUSPECTED EXISTING UNDERGROUND UTILITIES ARE TAKEN FROM EXISTING AVAILABLE INFORMATION AND SHOULD BE CONSIDERED APPROXIMATE. THERE MAY BE EXISTING UTILITY LINES OTHER THAN THOSE SHOWN. THE CONTRACTOR SHALL BE REQUIRED TO CONTACT THE PROPER UTILITY COMPANIES AND DIG-SAFE PRIOR TO BEGINNING ANY CONSTRUCTION ON THE SITE. ATLANTIC ENGINEERING DOES NOT WARRANT OR GUARANTEE THE LOCATION (S) OF ANY UTILITIES SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL DIMENSIONS AND GRADING ON THE SITE AND SHALL IMMEDIATELY REPORT ANY DISCREPANCIES OR DEVIATIONS FROM THE CONSTRUCTION PLANS TO THE ENGINEER. FAILURE TO PERFORM THIS VERIFICATION IN A TIMELY MANNER MAY RESULT IN A DELAY IN THE NECESSARY CORRECTIVE ACTION. NO ADDITIONAL COMPENSATION (TIME OR MONETARY) SHALL BE CONSIDERED DUE TO DELAYS IN THE CONTRACTOR'S INSTALLATIONS AS A RESULT OF CONDITIONS WHICH WERE NOT IDENTIFIED BY THE CONTRACTOR ON TIME FOR CORRECTION BY THE CONSTRUCTION MANAGER OR THE ENGINEER.
3. THE SITE SHALL BE GRADED AND COMPACTED TO THE ELEVATIONS AND CONTOURS SET FORTH IN THESE PLANS.
4. UNLESS OTHERWISE SPECIFIED, ALL INSTALLATION, CONSTRUCTION AND CONSTRUCTION MATERIALS SHALL, IN ALL RESPECTS, CONFORM TO THE FOLLOWING:
 - MASSACHUSETTS STATE BUILDING CODE, (LATEST EDITION)
 - MASSACHUSETTS HIGHWAY DESIGN STANDARDS (LATEST EDITION)
 - AMERICANS WITH DISABILITIES ACT
 - CITY OF NEWBURYPORT STANDARDS AND APPLICATION APPROVALS
5. IN THE CASE OF CONFLICT BETWEEN CODES, STANDARDS, REGULATIONS, SPECIFICATIONS, PLAN NOTES AND/OR MANUFACTURER REQUIREMENTS, THE MOST STRINGENT STANDARD AND PROVISION IS TO BE USED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SURVEY LAYOUT OF ALL ITEMS REQUIRED TO COMPLETE THE SCOPE OF WORK. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY CORRECTIVE ACTION REQUIRED FOR ITEMS NOT CONSTRUCTED WHERE PROPOSED.
7. THE CONTRACTOR SHALL CALL DIG-SAFE A MINIMUM OF 72 HOURS, EXCLUSIVE OF SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS, PRIOR TO BEGINNING ANY EXCAVATION AT THE SITE.
8. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL SAFETY CODES.
9. THE CONTRACTOR SHALL TAKE ADEQUATE PRECAUTIONS TO PROTECT ALL WALKS, STREETS, TREES, UTILITIES AND PLANTINGS ON OR OFF THE PREMISES, AND SHALL BE RESPONSIBLE, AT NO EXPENSE TO THE OWNER, TO REPAIR AND/OR REPLACE OR OTHERWISE MAKE GOOD AS DIRECTED BY THE OWNER ANY SUCH OR OTHER DAMAGE SO CAUSED.
10. THE CONTRACTOR SHALL REMOVE FROM THE SITE ALL RUBBISH AND DEBRIS DURING SITE CONSTRUCTION. STORAGE OF SUCH MATERIALS ON THE PROJECT SITE WILL NOT BE PERMITTED.
11. THE CONTRACTOR SHALL GIVE A NOTICE TO THE PERTINENT MUNICIPAL DEPARTMENTS AS REQUIRED BY PERMITS AND PROJECT APPROVALS BEFORE COMMENCING WORK IN THE FIELD.
12. THE PLANS AND SPECIFICATIONS FOR THIS SITE ARE INTENDED TO BE EXPLANATORY OF THE WORK TO BE DONE AND OF EACH OTHER, BUT SHOULD ANY OMISSION, ERRORS OR OTHER DISCREPANCIES APPEAR, THEY SHALL BE SUBJECT TO CORRECTION AND INTERPRETATION BY ATLANTIC ENGINEERING THEREBY FULFILLING THE INTENT OF THE PLANS.
13. GAS, TELEPHONE, CABLE AND ELECTRIC UTILITIES SHALL BE INSTALLED AT THE DIRECTION OF THE RESPECTIVE UTILITY AND TO THE STANDARDS REQUIRED BY THOSE UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE TO INCORPORATE THE COST AND SCHEDULING OF THESE ITEMS IN THEIR SCOPE OF SERVICES.
14. THE EXISTING CONDITIONS SHOWN ON THESE PLANS ARE TO BE CONSIDERED APPROXIMATE. THE EXISTING PLAN INFORMATION SHOWN SHALL BE USED FOR REFERENCE ONLY TO AID THE CONTRACTOR IN DETERMINING THE OVERALL EXISTING SITE CONDITIONS AND THE EXISTING SITE FEATURES WHICH WILL NEED TO BE DEMOLISHED OR CHANGED AS PART OF THE SITE IMPROVEMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL INFORMATION. THE OWNER SHALL NOT BE RESPONSIBLE FOR ANY ADDITIONAL COST INCURRED BY THE CONTRACTOR FOR CURRENT EXISTING CONDITIONS WHICH WERE NOT VERIFIED.
15. ALL CONSTRUCTION IS SUBJECT TO THE GRANTING OF ALL NECESSARY PERMITS BY THE CITY/TOWN. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL PERMITS ARE IN PLACE PRIOR TO BEGINNING ANY CONSTRUCTION.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY WORK PERFORMED OUTSIDE THE LIMIT OF WORK, AND IF NECESSARY SHALL, AT NO EXPENSE TO THE OWNER, CORRECT AND REMEDY ANY WORK DONE IN THESE AREAS. ANY QUESTIONS REGARDING THE LOCATION OF THE LIMIT OF WORK SHALL BE DIRECTED TO THE ENGINEER PRIOR TO PROCEEDING WITH ANY WORK ON THE SITE.
17. ALL FILL MATERIAL SHALL BE REMOVED FROM UNDERNEATH ALL INFILTRATING STRUCTURES DOWN TO CLEAN PERVIOUS IN-SITU SOIL. ALL OVER EXCAVATIONS SHALL BE REPLACED BY CLEAN COMPACTED COARSE SAND.

PUBLIC SAFETY

IN ORDER TO PROTECT THE PUBLIC SAFETY DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING AT ALL TIMES ALL NECESSARY SAFETY DEVICES AND PERSONNEL; WARNING LIGHTS; BARRICADES; AND FOR THE HIRING OF POLICE OFFICERS AS REQUIRED BY THE MUNICIPAL AUTHORITIES.

SITE CLEANING

THE CONTRACTOR SHALL REGULARLY INSPECT THE PERIMETER OF THE SITE TO CLEANUP AND REMOVE LOOSE CONSTRUCTION DEBRIS BEFORE IT LEAVES THE SITE. ALL DEMOLITION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE SITE AND DISPOSED OF TO A LEGAL DUMP SITE. ALL TRUCKS LEAVING THE SITE SHALL BE COVERED.

EROSION CONTROL NOTES

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL EROSION CONTROL MEASURES ON AN AS NECESSARY BASIS TO AVOID EXCESSIVE SOIL EROSION AND TO INSURE SOIL EROSION DOES NOT OCCUR OFF SITE. MEASURES MAY INCLUDE, BUT IS NOT LIMITED TO, HAY BALE DIKES AROUND DRAINAGE INLETS, SILT SOCKS, SILTATION FENCES, TEMPORARY DIVERSION AND SEDIMENTATION BASINS, MULCHING AND PLANTING OF DISTURBED AREAS. DURING CONSTRUCTION ANY EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS OF ANY STORM EVENT GENERATING MORE THAN 1/2 OF RAINFALL. ALL DISTURBED OR DAMAGED CONTROL DEVICES SHALL BE CLEANED, REPAIRED AND RESET AS NECESSARY.

DRAINAGE STRUCTURE NOTES

PRIOR TO THE COMMENCEMENT OF ANY SITE DEMOLITION OR WORK THE CONTRACTOR SHALL INSTALL SILTATION PROTECTION AT ALL CATCH BASINS, MANHOLES AND AT EACH EXISTING DRAINAGE INLET(S) THAT MAY BE AFFECTED BY THE WORK AT THE SITE AND AS INDICATED ON THE PLANS. AS SITE DRAINAGE IS BEING INSTALLED EACH NEWLY INSTALLED DRAINAGE STRUCTURE, LINE AND INLET SHALL RECEIVE SILTATION PROTECTION TO PREVENT SEDIMENT AND DEBRIS FROM ENTERING THE EXISTING AND NEW DRAINAGE SYSTEM, WATER COURSE OR RESERVOIR AREA. UPON COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL SILTATION PROTECTIONS ARE REMOVED AND ALL DRAINAGE STRUCTURES, LINES, WATER COURSES AND RESERVOIR AREAS ARE FREE OF SILTATION, STONES AND OTHER DEBRIS. ALL STRUCTURES, LINES, WATER COURSES AND RESERVOIR AREAS THAT REQUIRE CLEANING SHALL BE CLEANED OF SILT, STONES AND OTHER DEBRIS BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

SITE MANAGEMENT NOTES

SEE ADDITIONAL SITE MANAGEMENT NOTES ON THE FINAL SHEET OF THESE PLANS.

PARKING IMPROVEMENTS FOR THE HOPE COMMUNITY CHURCH OF NEWBURYPORT AT 11 HALE STREET IN NEWBURYPORT, MASSACHUSETTS

ASSESSOR'S LOCATION

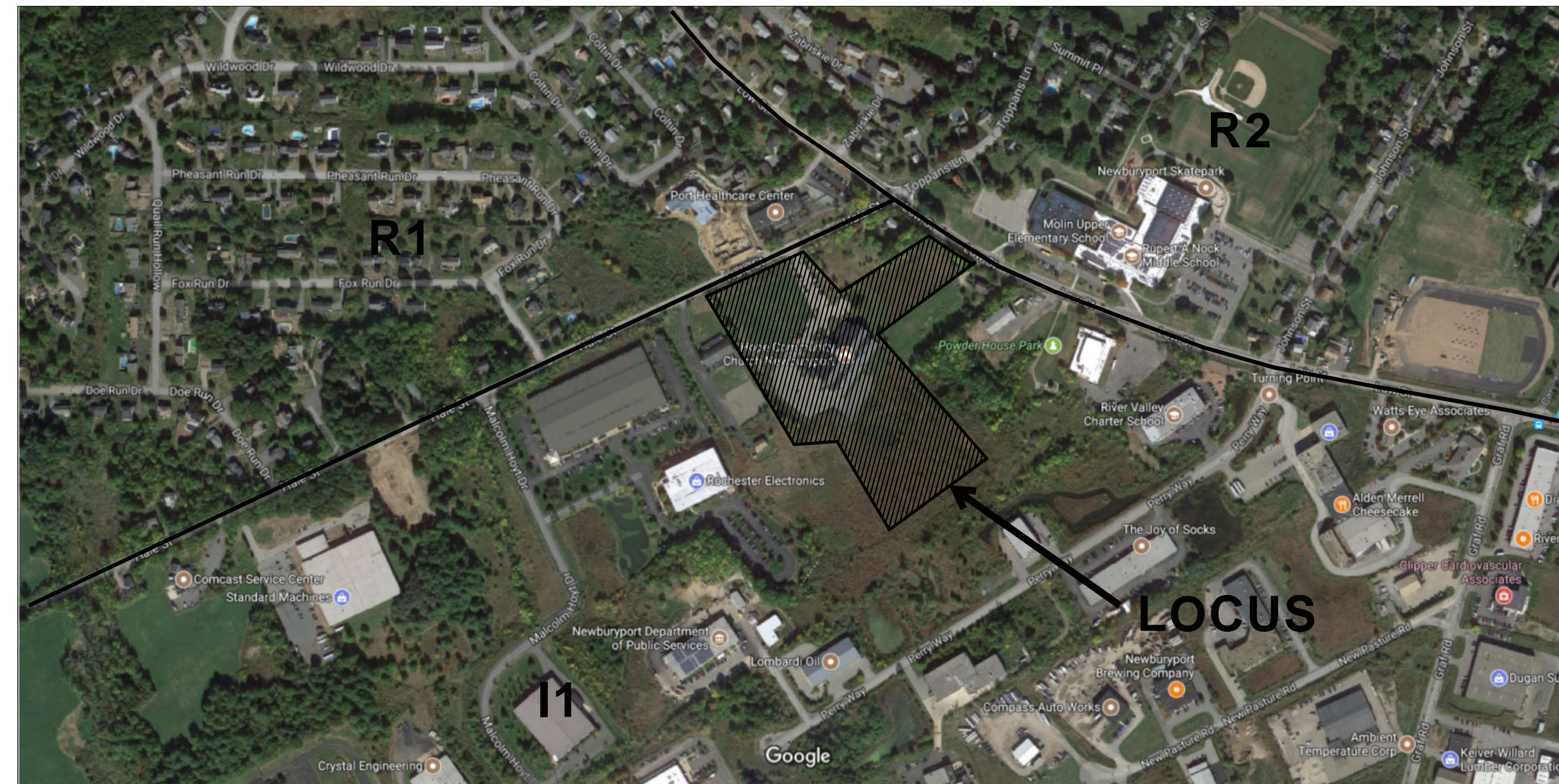
ASSESSOR'S MAP 83, PARCEL: 3
RECORD ADDRESS: 11 HALE STREET

OWNER OF RECORD

THE HOPE COMMUNITY CHURCH OF NEWBURYPORT
11 HALE STREET, NEWBURYPORT, MA
DEED REF: BOOK 14537, PAGE 422 & 423

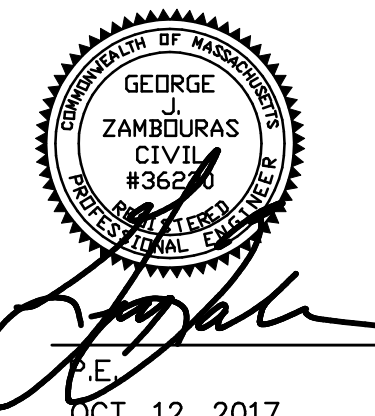
APPLICANT

THE HOPE COMMUNITY CHURCH OF NEWBURYPORT
11 HALE STREET, NEWBURYPORT, MA



LOCUS MAP
NTS

I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF IT CONFORMS WITH TECHNICAL, ETHICAL AND PROCEDURAL STANDARDS FOR THE PRACTICE OF PROFESSIONAL ENGINEERING IN THE COMMONWEALTH OF MASSACHUSETTS.



**PARKING IMPROVEMENTS
FOR HOPE
COMMUNITY CHURCH
AT
11 HALE STREET
IN
NEWBURYPORT, MASS.**

TITLE SHEET

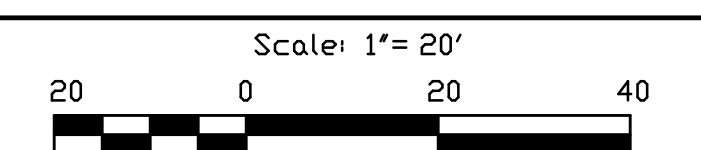
PREPARED FOR:
THE HOPE COMMUNITY CHURCH OF NEWBURYPORT
11 HALE STREET
NEWBURYPORT, MASSACHUSETTS

ENGINEER:
ATLANTIC ENGINEERING & SURVEY CONSULTANTS INC.
97 TENNEY STREET - SUITE 5 - GEORGETOWN, MA 01833
PHONE: 978-352-7870 FAX: 978-352-9940

DRAWING FILE: \SEQ93\HOPECHURCH-FEB-2017.DWG

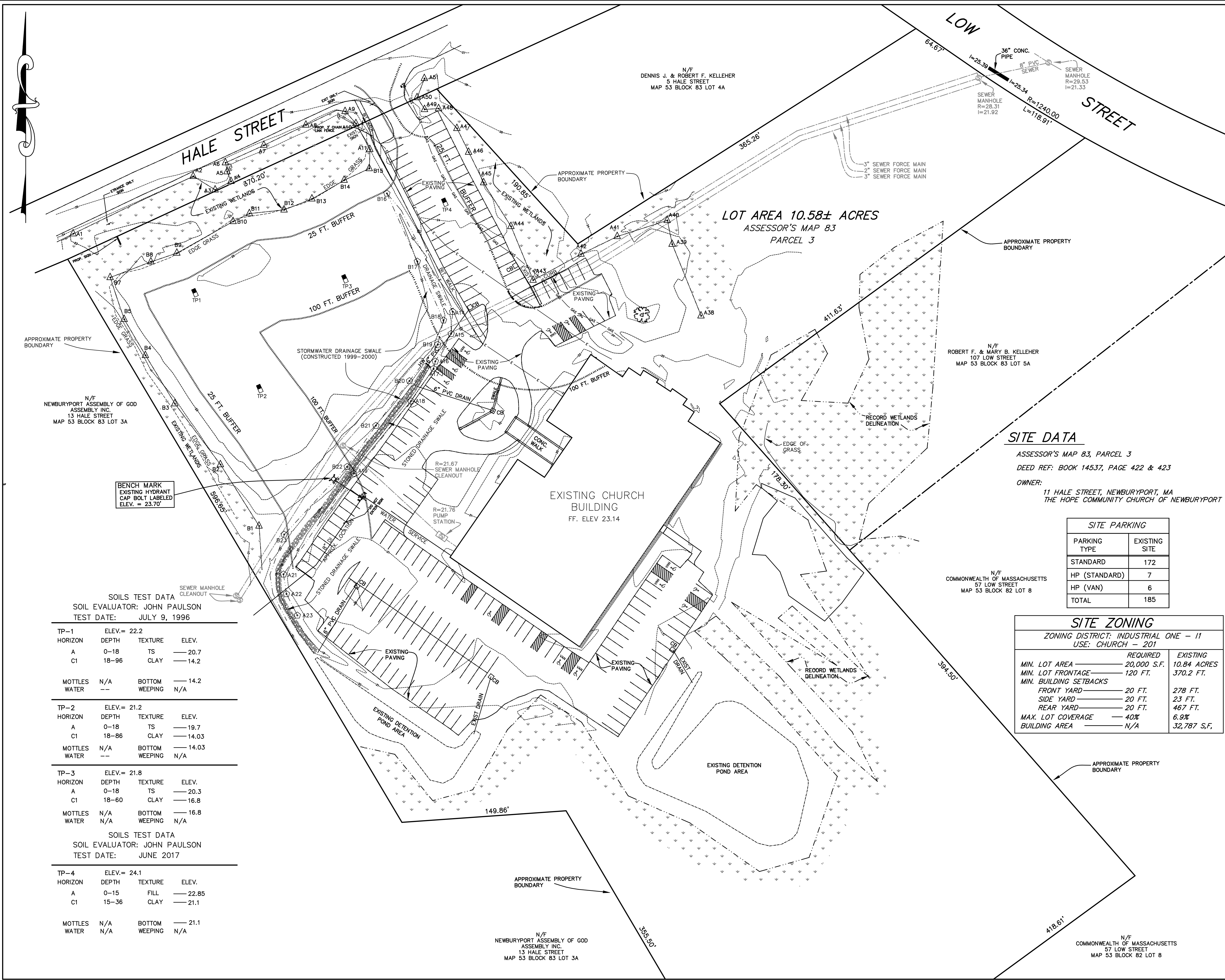
JOB NO. A1510-02 DATE: DEC. 14, 2017

revision #	date	description



PLAN INDEX

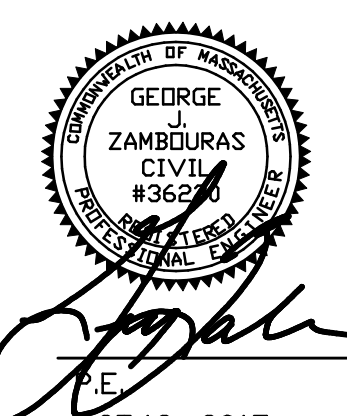
SHEET 1	—	TITLE SHEET
SHEET 2	—	EXISTING CONDITIONS
SHEET 3	—	SITE PREPARATION
SHEET 4	—	SITE IMPROVEMENTS
SHEET 5	—	SITE LAYOUT
SHEET 6	—	GRADING AND DRAINAGE
SHEET 7	—	PROFILE EXISTING ACCESS AISLE
SHEET 8	—	PROFILE PROPOSED ACCESS AISLE
SHEET 9	—	PROFILE DRAINAGE
SHEET 10	—	WETLANDS RESTORATION AND LANDSCAPE PLAN
SHEET 11-13	—	DETAILS
SHEET 14	—	SITE MANAGEMENT NOTES
SHEET 15	—	HISTORIC SITE PLAN
SHEET 15A	—	LIGHTING PHOTOMETRIC PLAN



LEGEND

- EXISTING CONTOUR ----- 100 -----
- PROPOSED CONTOUR ----- 100 -----
- EXISTING SPOT ELEVATION +100.0
- PROPOSED SPOT ELEVATION 100x0
- EXISTING EDGE OF PAVEMENT -----
- CONCRETE CURBING -----
- SEWER LINE ----- S ----- S -----
- DRAIN LINE ----- D ----- D -----
- WATER LINE ----- W ----- W -----
- ELECTRIC CONDUIT ----- E ----- E -----
- GAS LINE ----- GAS ----- GAS -----
- CATCH BASIN [Symbol]
- DRAIN MANHOLE [Symbol]
- HYDRANT [Symbol]
- GATE VALVE [Symbol]
- STONE WALL [Symbol]
- CENTERLINE / STATION [Symbol]
- FLARED END SECTION [Symbol]
- CONCRETE HEADWALL [Symbol]
- EXISTING SITE LIGHT [Symbol]
- PROPOSED SITE LIGHTING [Symbol]
- GUARDRAIL [Symbol]
- FENCE [Symbol]
- RIP - RAP [Symbol]
- TEST PIT [Symbol]
- WETLAND FLAG [Symbol]
- STORMWATER DRAINAGE SWALE FLAG [Symbol]
- BUFFER ZONES [Symbol]
- BORDERING VEGETATED WETLANDS [Symbol]
- WETLAND AREA [Symbol]
- TEMPORARY EROSION CONTROL [Symbol]

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OCT.12, 2017
Date

SITE DATA

ASSESSOR'S MAP 83, PARCEL 3
DEED REF: BOOK 14537, PAGE 422 & 423
OWNER: 11 HALE STREET, NEWBURYPORT, MA
THE HOPE COMMUNITY CHURCH OF NEWBURYPORT

SITE PARKING	
PARKING TYPE	EXISTING SITE
STANDARD	172
HP (STANDARD)	7
HP (VAN)	6
TOTAL	185

SITE ZONING		
ZONING DISTRICT: INDUSTRIAL ONE - I1		
USE: CHURCH - 201		
	REQUIRED	EXISTING
MIN. LOT AREA	20,000 S.F.	10.84 ACRES
MIN. LOT FRONTAGE	120 FT.	370.2 FT.
MIN. BUILDING SETBACKS		
FRONT YARD	20 FT.	278 FT.
SIDE YARD	20 FT.	23 FT.
REAR YARD	20 FT.	467 FT.
MAX. LOT COVERAGE	40%	6.9%
BUILDING AREA	N/A	32,787 S.F.

PARKING IMPROVEMENTS FOR HOPE COMMUNITY CHURCH AT 11 HALE STREET IN NEWBURYPORT, MASS.

EXISTING CONDITIONS

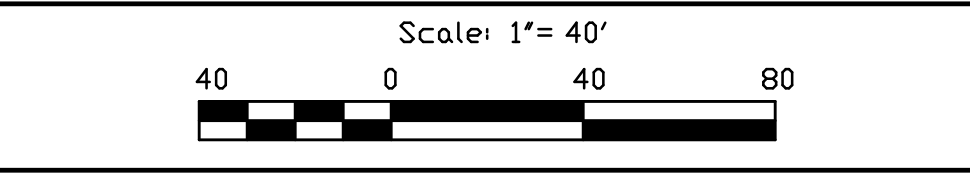
PREPARED FOR: THE HOPE COMMUNITY CHURCH OF NEWBURYPORT
11 HALE STREET
NEWBURYPORT, MASSACHUSETTS

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JOB NO. A1510-02 DATE: DEC. 14, 2017

revision #	date	description



SOILS TEST DATA
SOIL EVALUATOR: JOHN PAULSON
TEST DATE: JULY 9, 1996

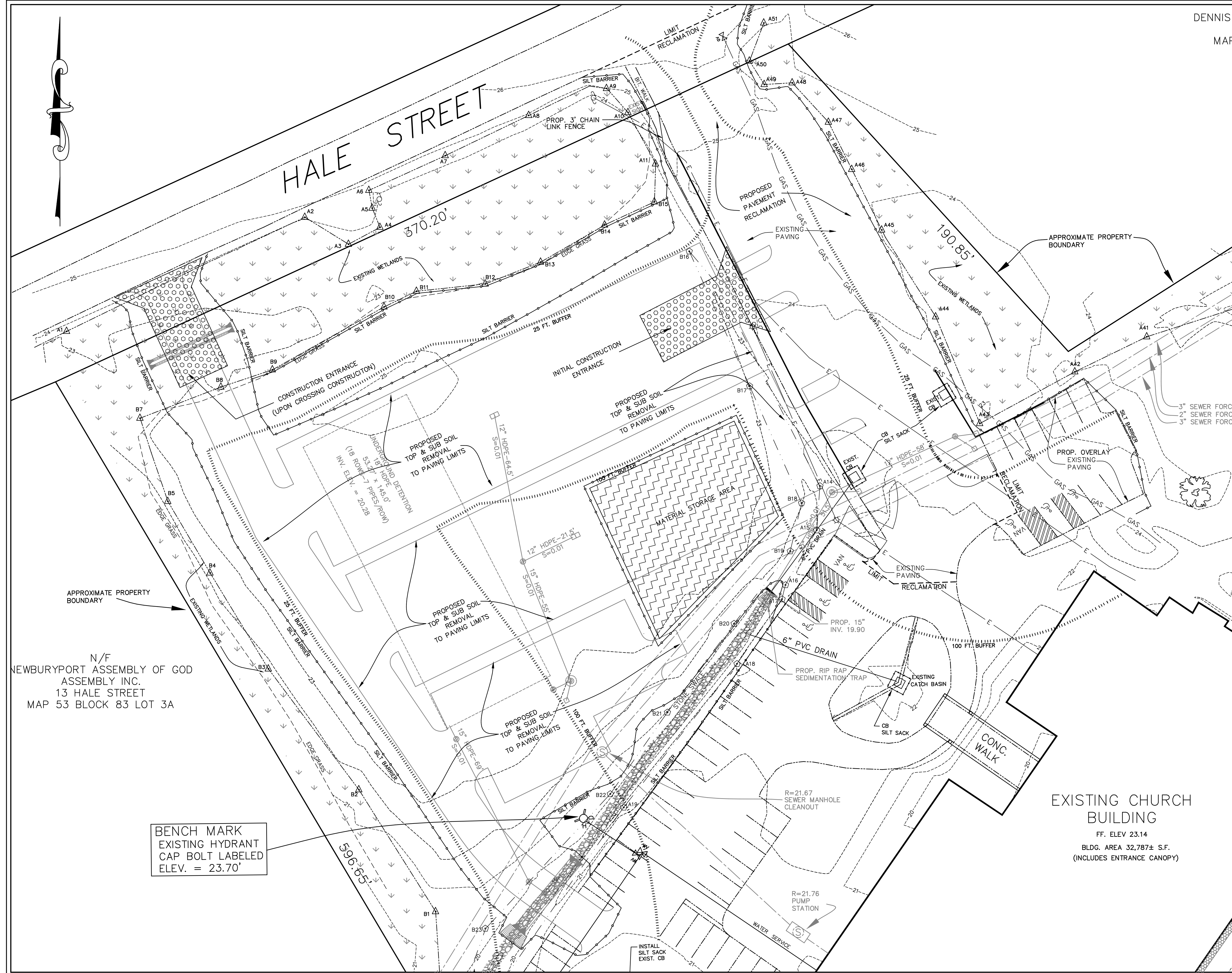
TP-1	ELEV. = 22.2		
HORIZON	DEPTH	TEXTURE	ELEV.
A	0-18	TS	20.7
C1	18-96	CLAY	14.2
MOTTLES	N/A	BOTTOM	14.2
WATER	--	WEEPING	N/A

TP-2	ELEV. = 21.2		
HORIZON	DEPTH	TEXTURE	ELEV.
A	0-18	TS	19.7
C1	18-86	CLAY	14.03
MOTTLES	N/A	BOTTOM	14.03
WATER	--	WEEPING	N/A

TP-3	ELEV. = 21.8		
HORIZON	DEPTH	TEXTURE	ELEV.
A	0-18	TS	20.3
C1	18-60	CLAY	16.8
MOTTLES	N/A	BOTTOM	16.8
WATER	N/A	WEEPING	N/A

SOILS TEST DATA
SOIL EVALUATOR: JOHN PAULSON
TEST DATE: JUNE 2017

TP-4	ELEV. = 24.1		
HORIZON	DEPTH	TEXTURE	ELEV.
A	0-15	FILL	22.85
C1	15-36	CLAY	21.1
MOTTLES	N/A	BOTTOM	21.1
WATER	N/A	WEEPING	N/A

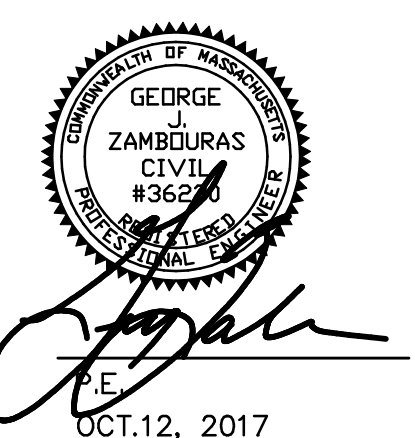


DENNIS
MAP

LEGEND

EXISTING CONTOUR	--- 100 ---
PROPOSED CONTOUR	— 100 —
EXISTING SPOT ELEVATION	+100.0
PROPOSED SPOT ELEVATION	100x0
EXISTING EDGE OF PAVEMENT	— — — — —
CONCRETE CURBING	— — — — —
SEWER LINE	— S — S —
DRAIN LINE	— D — D —
WATER LINE	— W — W —
ELECTRIC CONDUIT	— E — E —
GAS LINE	— GAS — GAS —
CATCH BASIN	□
DRAIN MANHOLE	⊙
HYDRANT	⊗
GATE VALVE	⊗ WG
STONE WALL	— — — — —
CENTERLINE / STATION	— 00 — 24 — 00 —
FLARED END SECTION	— FE —
CONCRETE HEADWALL	— HW —
EXISTING SITE LIGHT	⊙
PROPOSED SITE LIGHTING	□ LP
GUARDRAIL	— — — — —
FENCE	— x — x — x —
RIP - RAP	▨
TEST PIT	■ TP
WETLAND FLAG	△ A48
BUFFER ZONES	— — — — —
BORDERING VEGETATED WETLANDS	— — — — —
WETLAND AREA	— — — — —
TEMPORARY EROSION CONTROL	— — — — —

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**PARKING IMPROVEMENTS
FOR HOPE
COMMUNITY CHURCH
AT
11 HALE STREET
IN
NEWBURYPORT, MASS.**

SITE PREPARATION

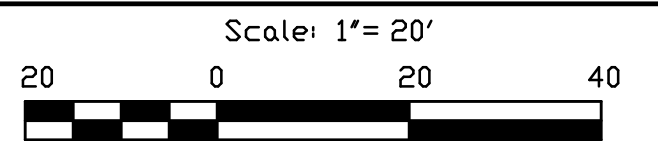
PREPARED FOR:
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11 HALE STREET
NEWBURYPORT, MASSACHUSETTS

ENGINEER:
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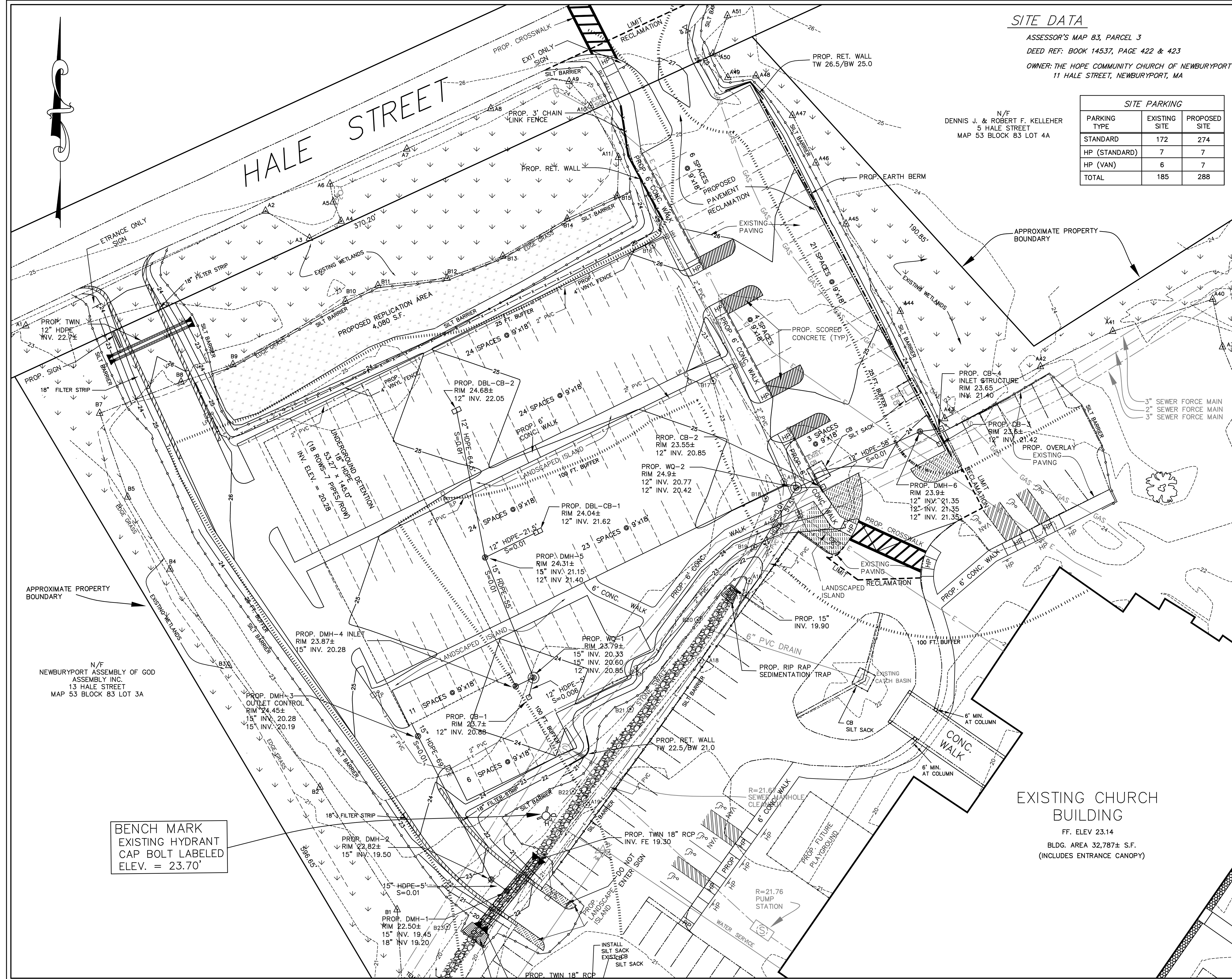
revision #	date	description



N/F
NEWBURYPORT ASSEMBLY OF GOD
ASSEMBLY INC.
13 HALE STREET
MAP 53 BLOCK 83 LOT 3A

BENCH MARK
EXISTING HYDRANT
CAP BOLT LABELED
ELEV. = 23.70'

EXISTING CHURCH
BUILDING
FF. ELEV 23.14
BLDG. AREA 32,787± S.F.
(INCLUDES ENTRANCE CANOPY)



SITE DATA

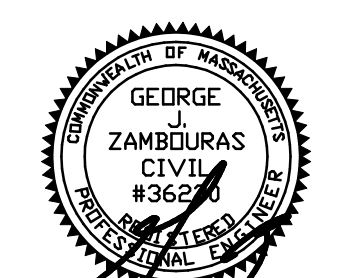
ASSESSOR'S MAP 83, PARCEL 3
 DEED REF: BOOK 14537, PAGE 422 & 423
 OWNER: THE HOPE COMMUNITY CHURCH OF NEWBURYPORT
 11 HALE STREET, NEWBURYPORT, MA

SITE PARKING		
PARKING TYPE	EXISTING SITE	PROPOSED SITE
STANDARD	172	274
HP (STANDARD)	7	7
HP (VAN)	6	7
TOTAL	185	288

LEGEND

- EXISTING CONTOUR ----- 100
- PROPOSED CONTOUR ----- 100
- EXISTING SPOT ELEVATION +100.0
- PROPOSED SPOT ELEVATION 100x0
- EXISTING EDGE OF PAVEMENT -----
- CONCRETE CURBING -----
- SEWER LINE ----- S ----- S
- DRAIN LINE ----- D ----- D
- WATER LINE ----- W ----- W
- ELECTRIC CONDUIT ----- E ----- E
- GAS LINE ----- GAS ----- GAS
- CATCH BASIN [Symbol]
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- GUARDRAIL [Symbol]
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George J. Zambouras
 Date: OCT. 12, 2017

PARKING IMPROVEMENTS FOR HOPE COMMUNITY CHURCH AT 11 HALE STREET IN NEWBURYPORT, MASS.

SITE IMPROVEMENTS

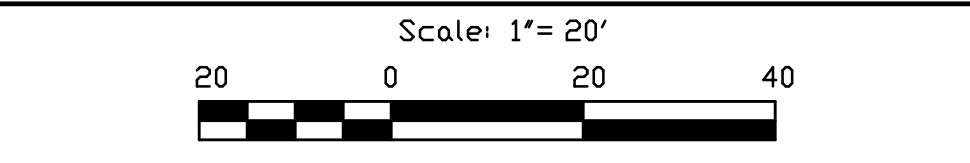
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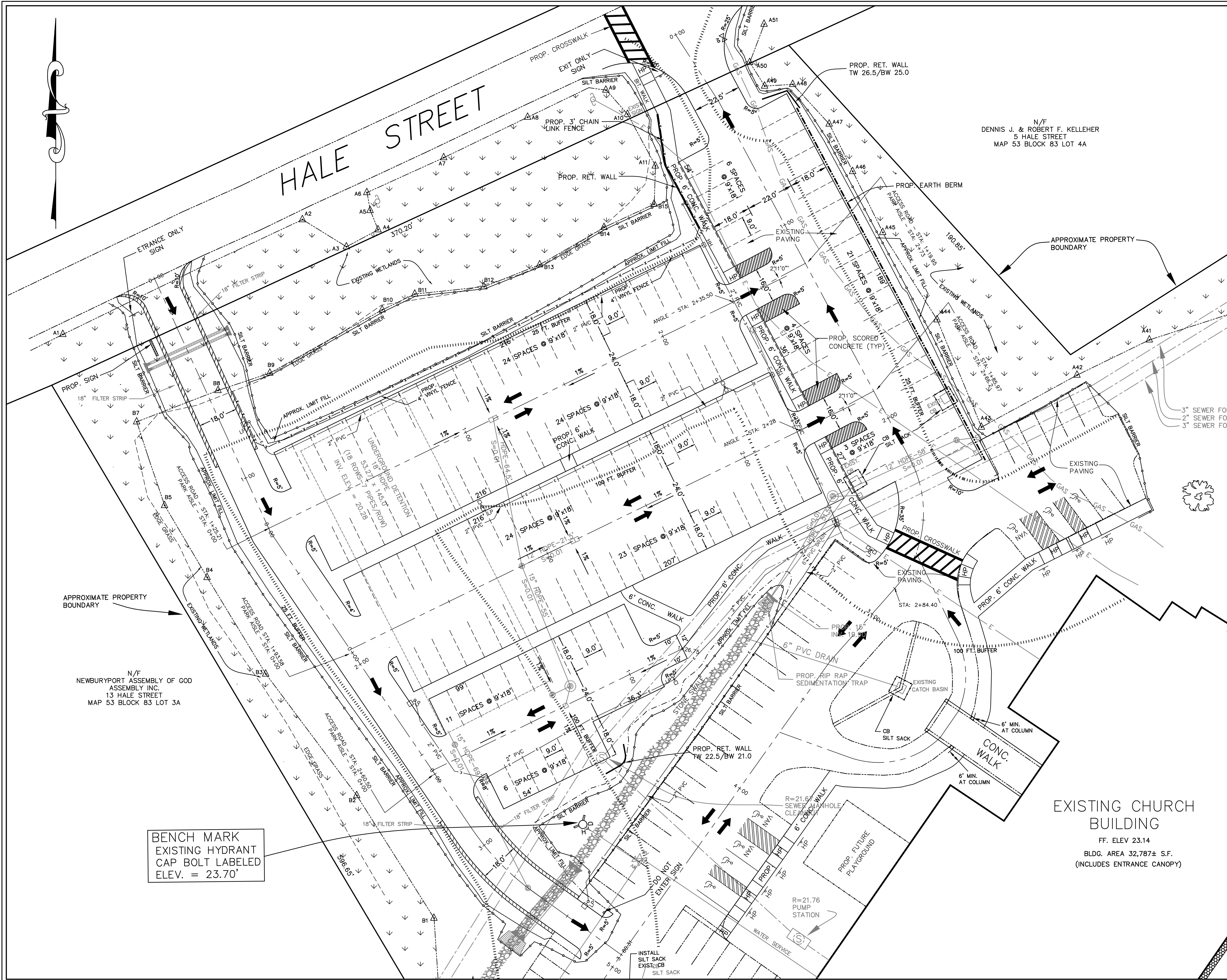
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BENCH MARK
 EXISTING HYDRANT
 CAP BOLT LABELED
 ELEV. = 23.70'

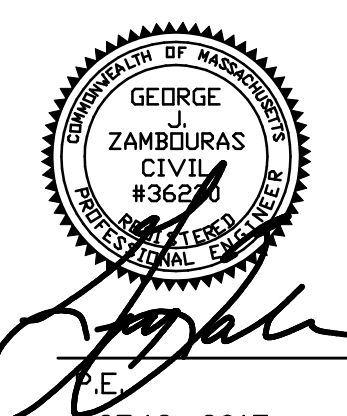
EXISTING CHURCH BUILDING
 FF. ELEV 23.14
 BLDG. AREA 32,787± S.F.
 (INCLUDES ENTRANCE CANOPY)



LEGEND

EXISTING CONTOUR	---	100
PROPOSED CONTOUR	---	100
EXISTING SPOT ELEVATION	+	100.0
PROPOSED SPOT ELEVATION	+	100x0
EXISTING EDGE OF PAVEMENT	---	
CONCRETE CURBING	---	
SEWER LINE	S	S
DRAIN LINE	D	D
WATER LINE	W	W
ELECTRIC CONDUIT	E	E
GAS LINE	GAS	GAS
CATCH BASIN	□	
DRAIN MANHOLE	⊙	
HYDRANT	⊕	
GATE VALVE	⊗	WG
STONE WALL	---	
CENTERLINE / STATION	---	
FLARED END SECTION	---	FE
CONCRETE HEADWALL	---	HW
EXISTING SITE LIGHT	⊙	
PROPOSED SITE LIGHTING	⊙	LP
GUARDRAIL	---	
FENCE	x-x-x	
RIP - RAP	▨	
TEST PIT	■	TP
WETLAND FLAG	△	A48
BUFFER ZONES	---	
BORDERING VEGETATED WETLANDS	---	
WETLAND AREA	---	
TEMPORARY EROSION CONTROL	---	SILT BARRIER

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COMMUNITY CHURCH
AT
11 HALE STREET
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SITE LAYOUT

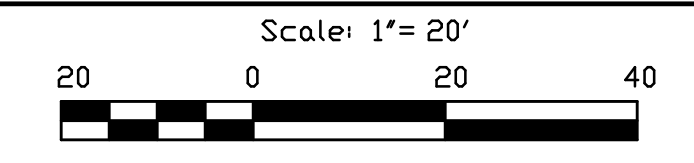
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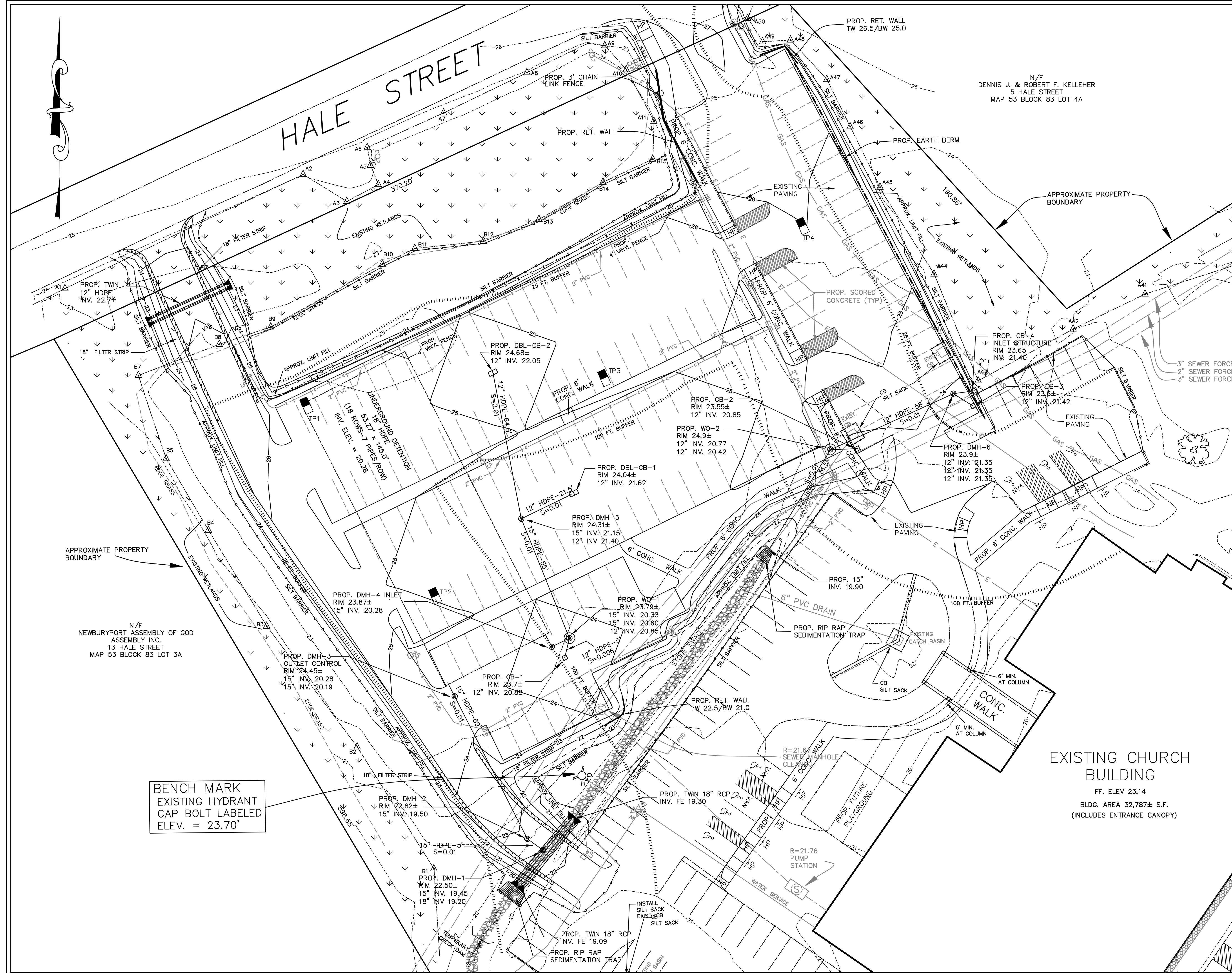


EXISTING CHURCH
BUILDING
FF. ELEV 23.14
(BLDG. AREA 32,787± S.F.
(INCLUDES ENTRANCE CANOPY)

BENCH MARK
EXISTING HYDRANT
CAP BOLT LABELED
ELEV. = 23.70'

N/F
NEWBURYPORT ASSEMBLY OF GOD
ASSEMBLY INC.
13 HALE STREET
MAP 53 BLOCK 83 LOT 3A

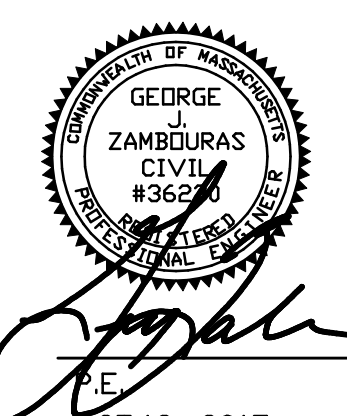
N/F
DENNIS J. & ROBERT F. KELLEHER
5 HALE STREET
MAP 53 BLOCK 83 LOT 4A



LEGEND

EXISTING CONTOUR	---	100
PROPOSED CONTOUR	—	100
EXISTING SPOT ELEVATION	+	100.0
PROPOSED SPOT ELEVATION		100x0
EXISTING EDGE OF PAVEMENT	---	
CONCRETE CURBING	---	
SEWER LINE	S	S
DRAIN LINE	D	D
WATER LINE	W	W
ELECTRIC CONDUIT	E	E
GAS LINE	GAS	GAS
CATCH BASIN	□	
DRAIN MANHOLE	⊙	
HYDRANT	⊗	
GATE VALVE	⊗	WG
STONE WALL	—	
CENTERLINE / STATION	—	
FLARED END SECTION	—	FE
CONCRETE HEADWALL	—	HW
EXISTING SITE LIGHT	⊙	
PROPOSED SITE LIGHTING	⊙	LP
GUARDRAIL	—	
FENCE	x	x
RIP - RAP	▨	
TEST PIT	■	TP
WETLAND FLAG	△	A48
BUFFER ZONES	---	
BORDERING VEGETATED WETLANDS	---	
WETLAND AREA	---	
TEMPORARY EROSION CONTROL	---	SILT BARRIER

I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF IT CONFORMS WITH TECHNICAL, ETHICAL AND PROCEDURAL STANDARDS FOR THE PRACTICE OF PROFESSIONAL ENGINEERING IN THE COMMONWEALTH OF MASSACHUSETTS.



OCT. 12, 2017
Date

**PARKING IMPROVEMENTS
FOR HOPE
COMMUNITY CHURCH
AT
11 HALE STREET
IN
NEWBURYPORT, MASS.**

GRADING & DRAINAGE PLAN

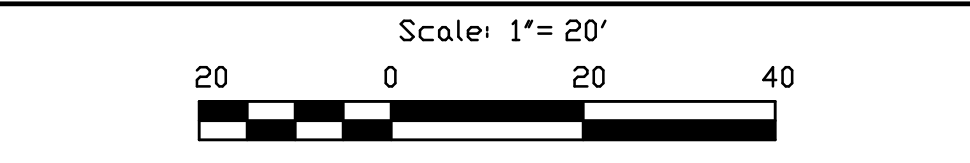
PREPARED FOR:
THE HOPE COMMUNITY CHURCH OF NEWBURYPORT
11 HALE STREET
NEWBURYPORT, MASSACHUSETTS

ENGINEER:
ATLANTIC ENGINEERING & SURVEY CONSULTANTS INC.
97 TENNEY STREET - SUITE 5 - GEORGETOWN, MA 01833
PHONE: 978-352-7870 FAX: 978-352-9940

DRAWING FILE: \SEQ93\HOPECHURCH-FEB-2017.DWG

JOB NO. A1510-02 DATE: DEC. 14, 2017

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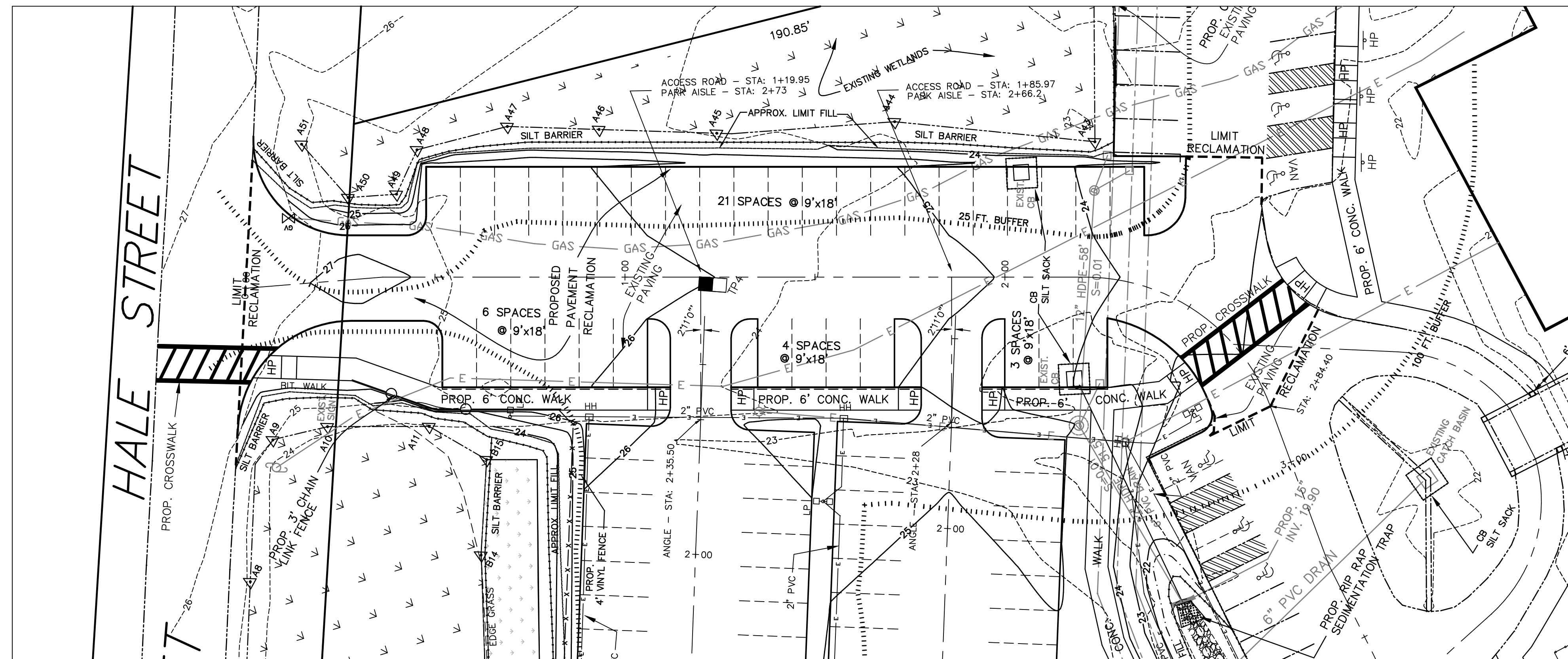


N/F
DENNIS J. & ROBERT F. KELLEHER
5 HALE STREET
MAP 53 BLOCK 83 LOT 4A

N/F
NEWBURYPORT ASSEMBLY OF GOD
ASSEMBLY INC.
13 HALE STREET
MAP 53 BLOCK 83 LOT 3A

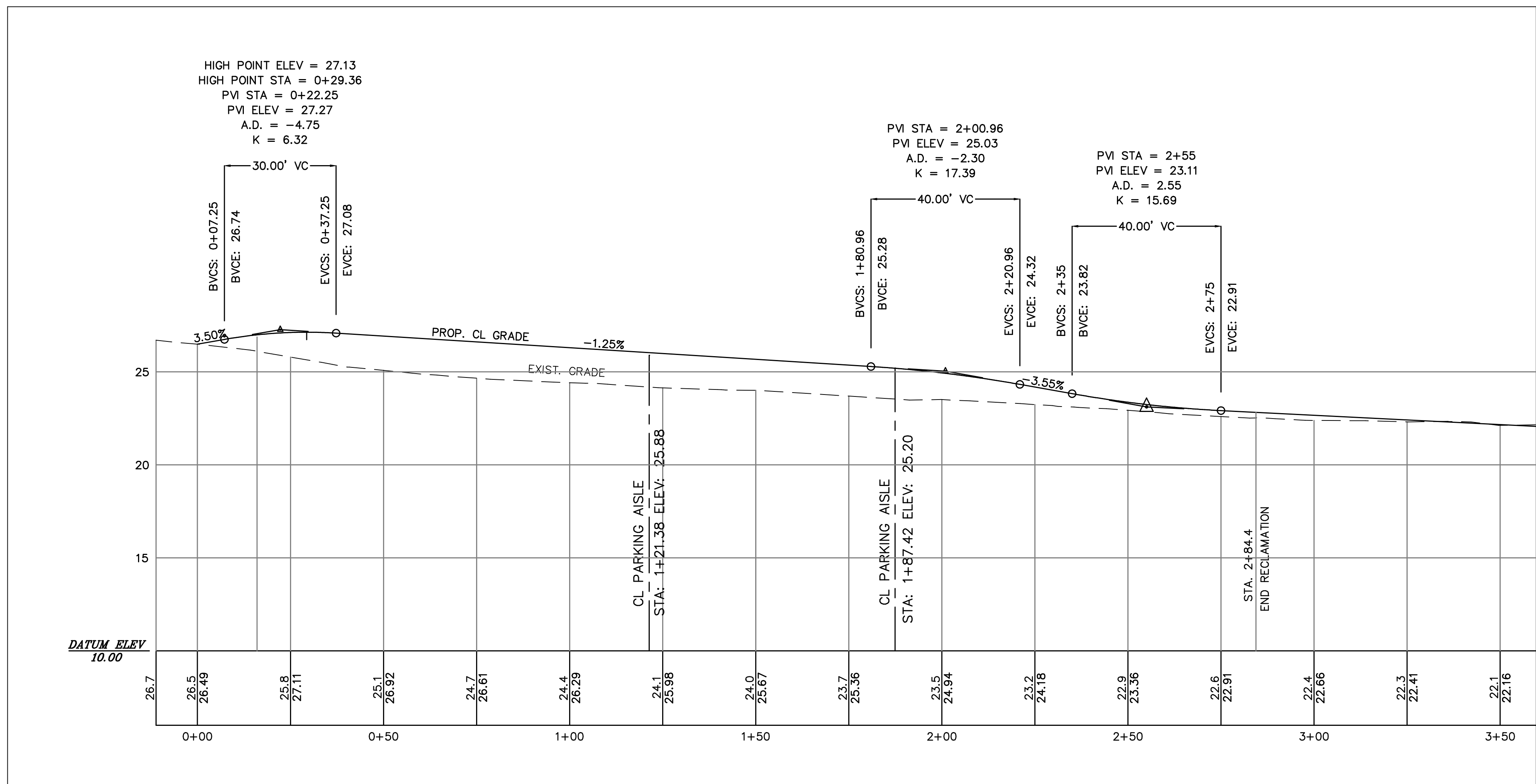
BENCH MARK
EXISTING HYDRANT
CAP BOLT LABELED
ELEV. = 23.70'

EXISTING CHURCH
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FF. ELEV 23.14
BLDG. AREA 32,787± S.F.
(INCLUDES ENTRANCE CANOPY)



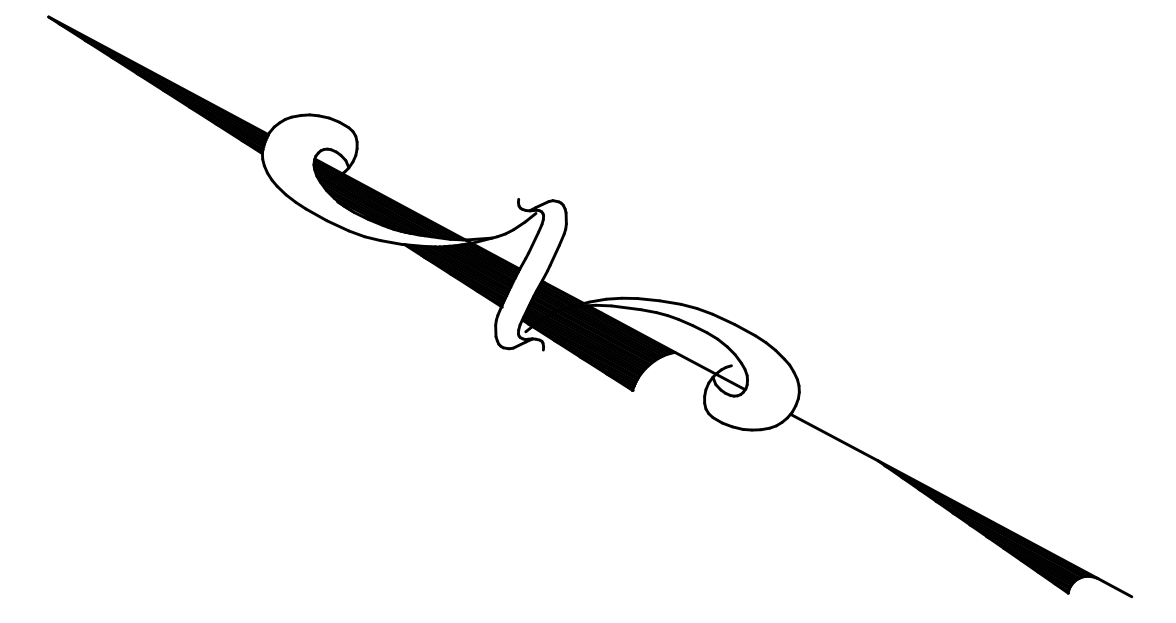
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SCALE: 1"=20'

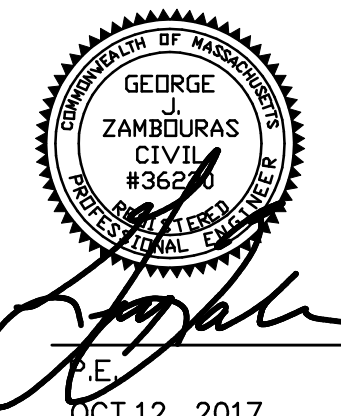


EXISTING ACCESS AISLE PROFILE

SCALE: 1"=20' HORZ.
1"=4' VERT.



I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF IT CONFORMS WITH TECHNICAL, ETHICAL AND PROCEDURAL STANDARDS FOR THE PRACTICE OF PROFESSIONAL ENGINEERING IN THE COMMONWEALTH OF MASSACHUSETTS.



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**PARKING IMPROVEMENTS
FOR HOPE
COMMUNITY CHURCH
AT
11 HALE STREET
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EXIST. ACCESS AISLE PROFILE

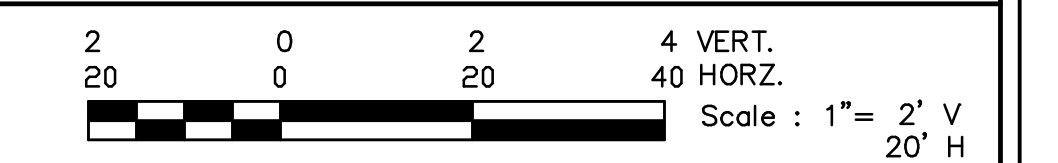
PREPARED FOR:
THE HOPE COMMUNITY CHURCH OF NEWBURYPORT
11 HALE STREET
NEWBURYPORT, MASSACHUSETTS

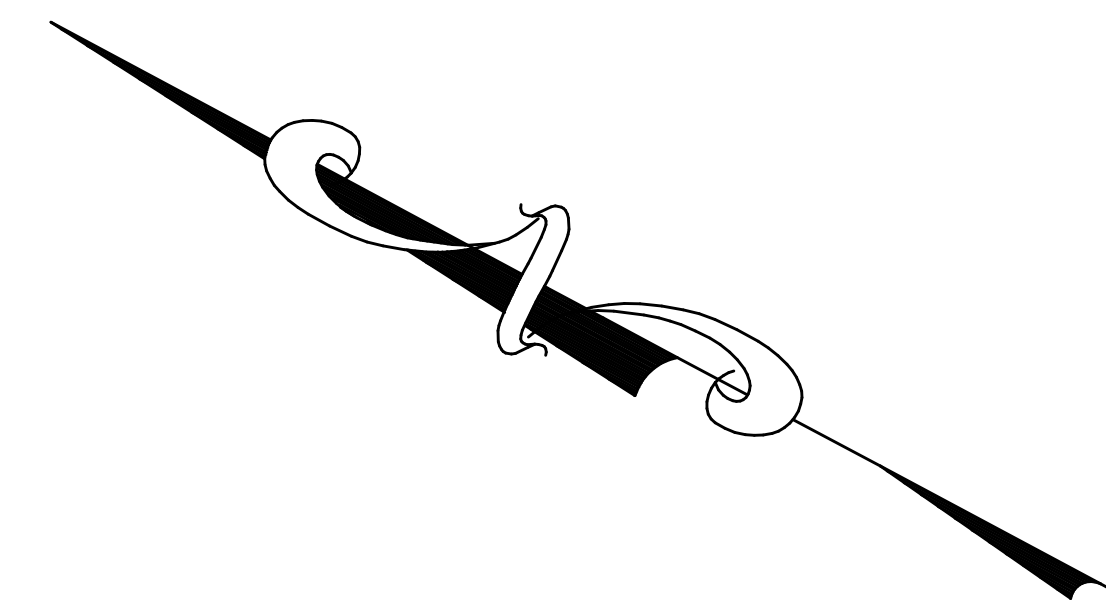
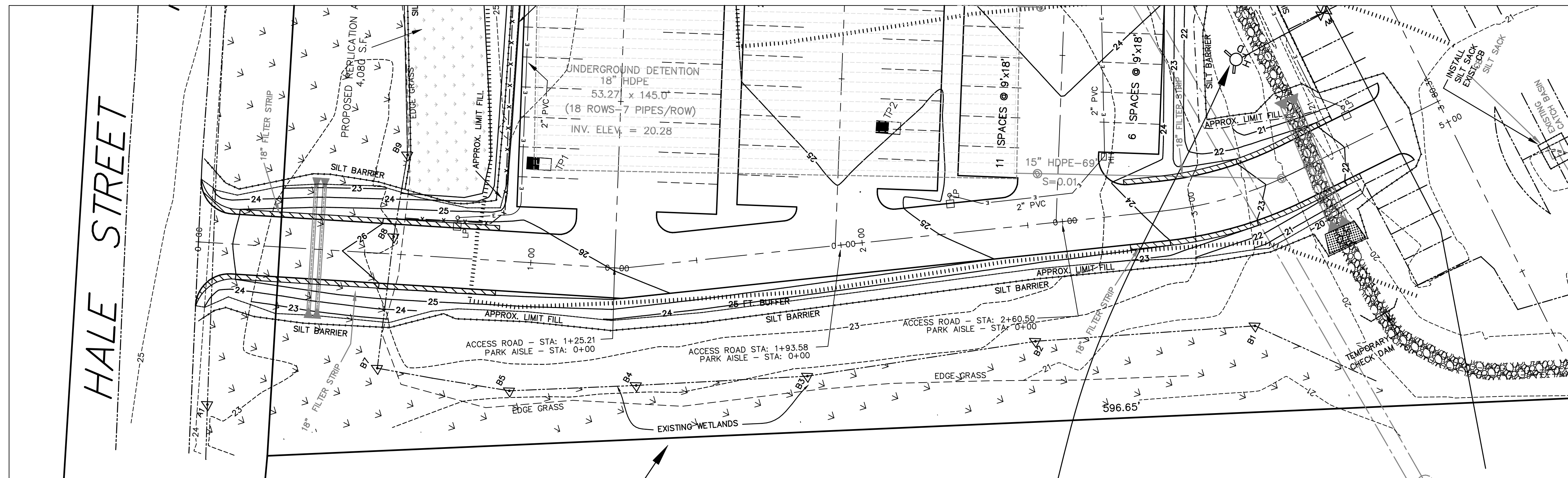
ENGINEER:
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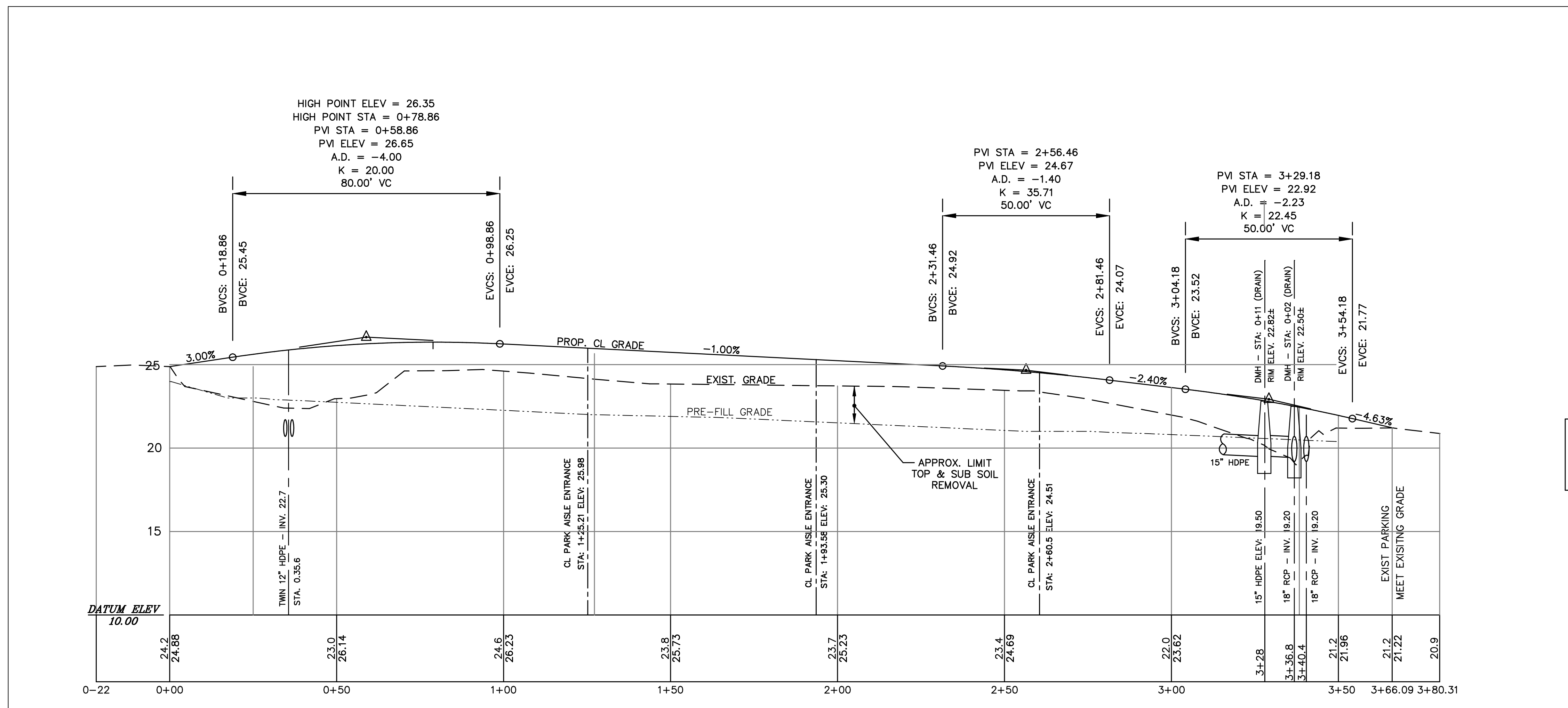
JOB NO. A1510-02 DATE: DEC. 14, 2017

revision #	date	description





PROPOSED ACCESS AISLE PLAN
SCALE: 1"=20'



PROPOSED ACCESS AISLE PROFILE
SCALE: 1"=20' HORZ.
1"=4' VERT.

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PROP. ACCESS AISLE PROFILE

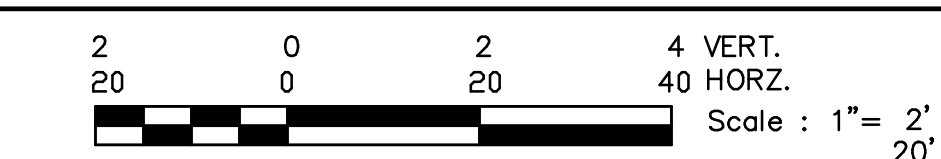
PREPARED FOR:
THE HOPE COMMUNITY CHURCH OF NEWBURYPORT
11 HALE STREET
NEWBURYPORT, MASSACHUSETTS

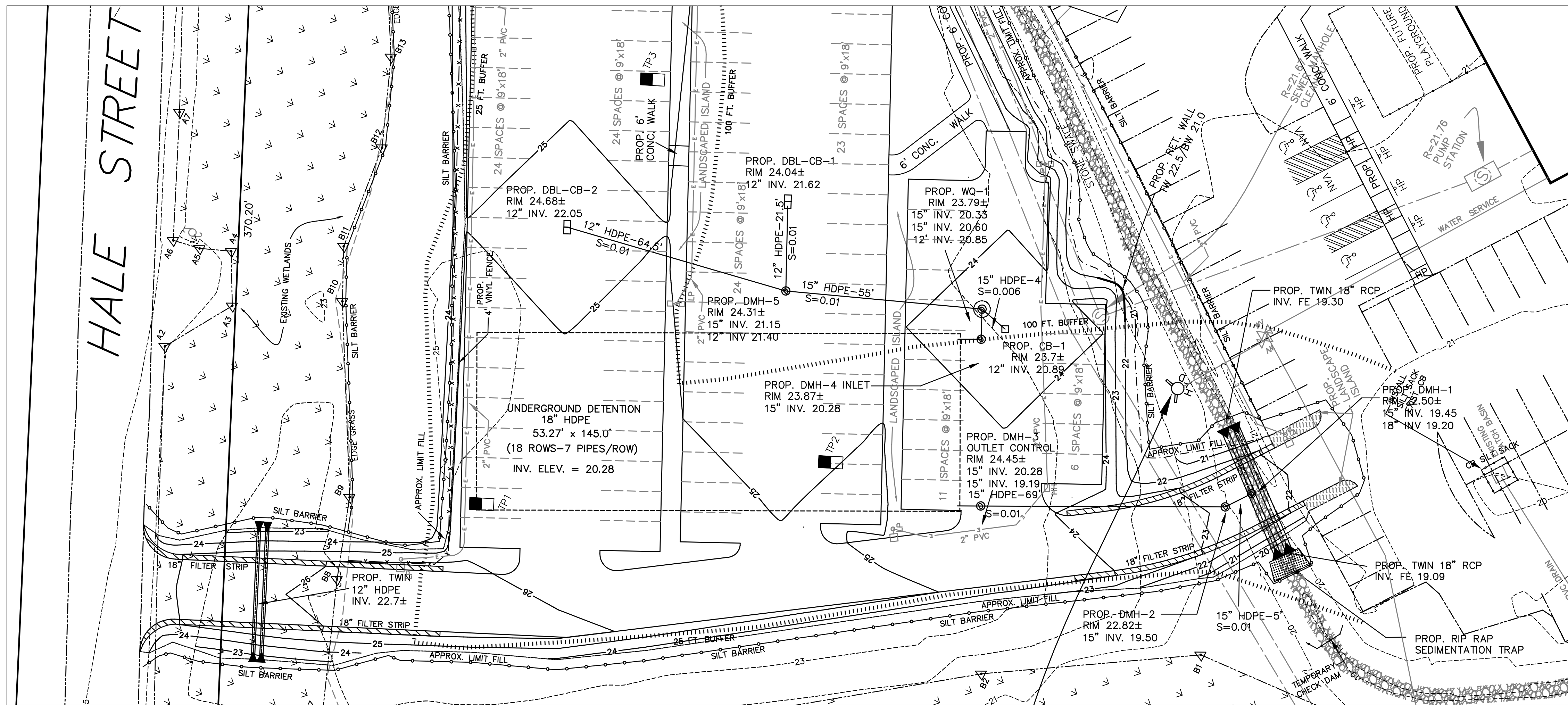
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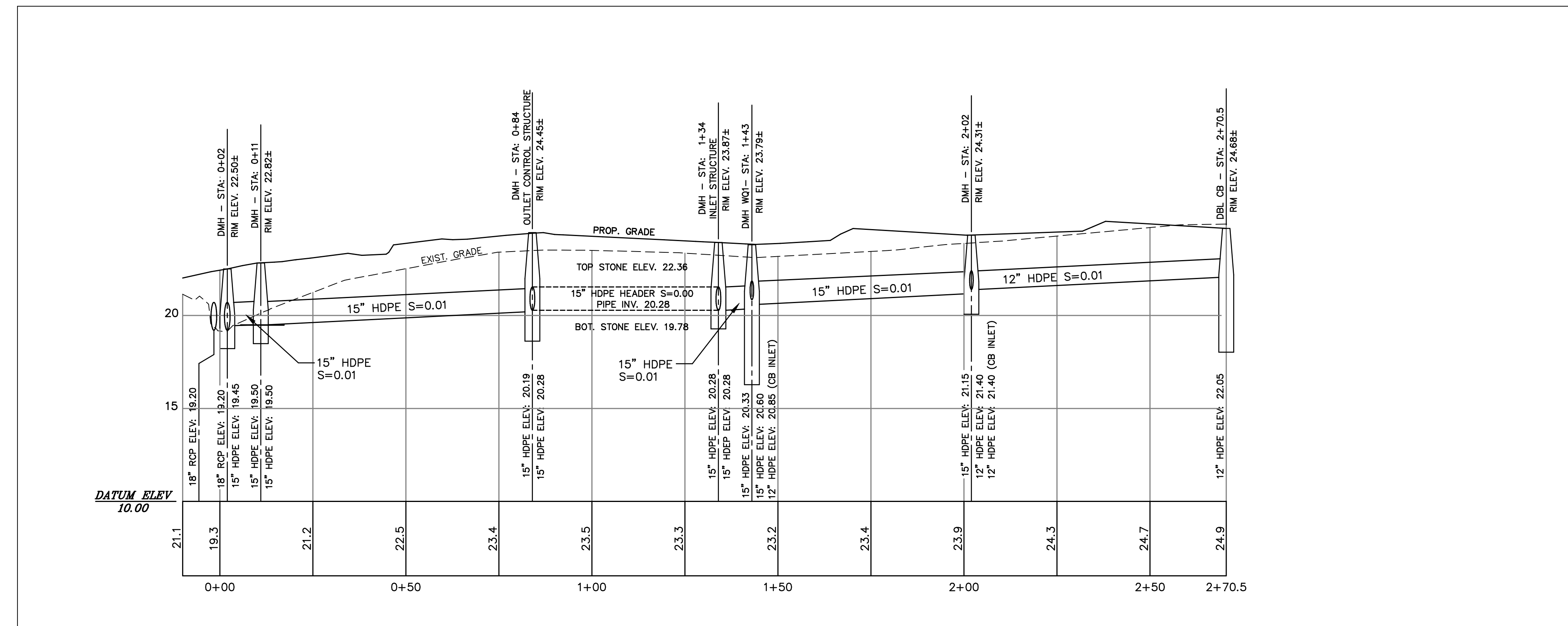
JOB NO. A1510-02 DATE: DEC. 14, 2017

revision #	date	description



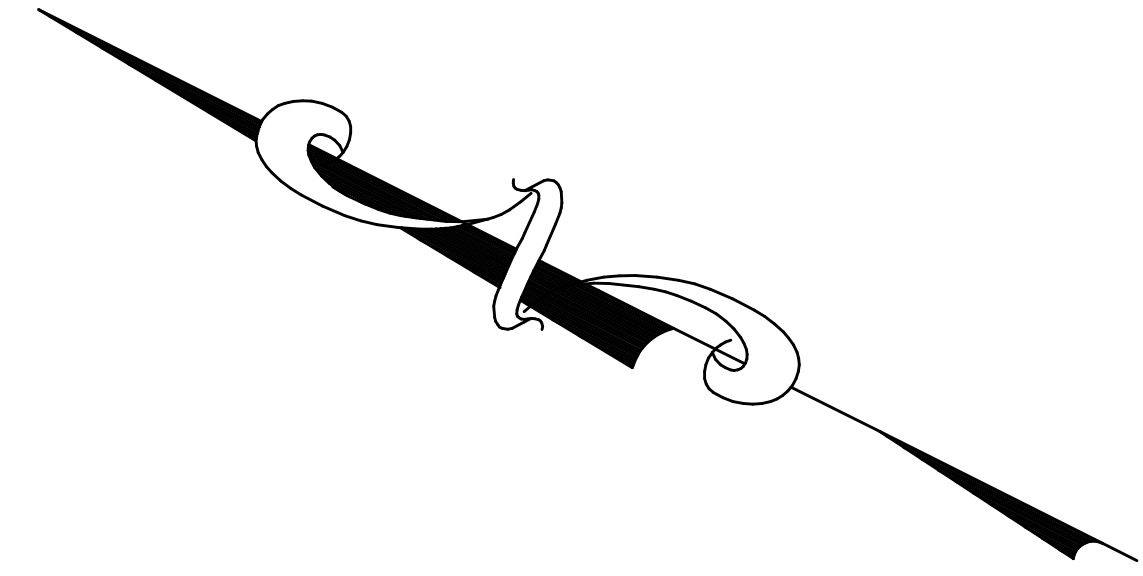


DRAINAGE LAYOUT
SCALE: 1"=20'

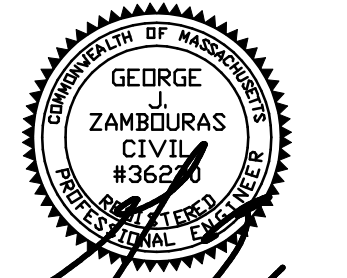


DRAINAGE PROFILE

SCALE: 1"=20' HORIZ.
1"=4' VERT.



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George J. Zambouras
P.E.
Date: OCT. 12, 2017

**PARKING IMPROVEMENTS
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COMMUNITY CHURCH
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NEWBURYPORT, MASS.**

DRAINAGE PROFILE

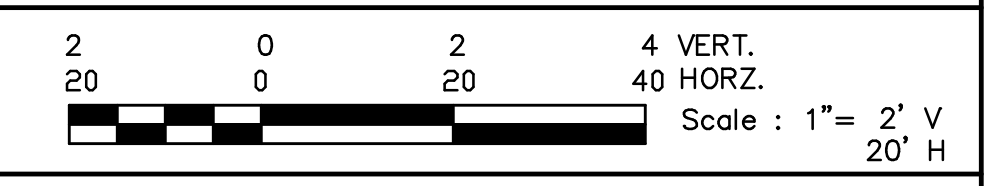
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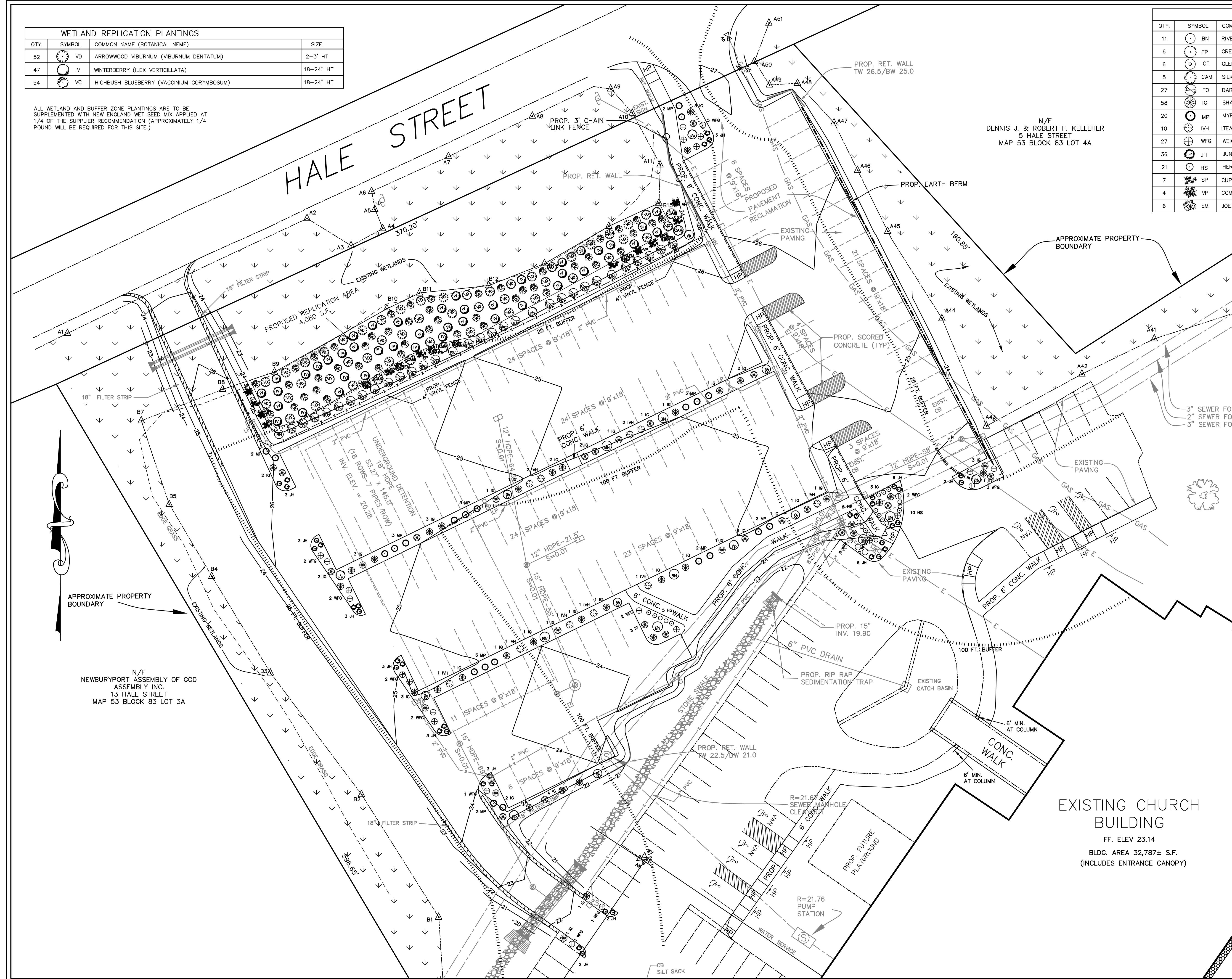
revision #	date	description



WETLAND REPLICATION PLANTINGS			
QTY.	SYMBOL	COMMON NAME (BOTANICAL NAME)	SIZE
52	VD	ARROWWOOD VIBURNUM (VIBURNUM DENTATUM)	2-3' HT
47	IV	WINTERBERRY (ILEX VERTICILLATA)	18-24" HT
54	VC	HIGHBUSH BLUEBERRY (VACCINIUM CORYMBOSUM)	18-24" HT

ALL WETLAND AND BUFFER ZONE PLANTINGS ARE TO BE SUPPLEMENTED WITH NEW ENGLAND WET SEED MIX APPLIED AT 1/4 OF THE SUPPLIER RECOMMENDATION (APPROXIMATELY 1/4 POUND WILL BE REQUIRED FOR THIS SITE.)

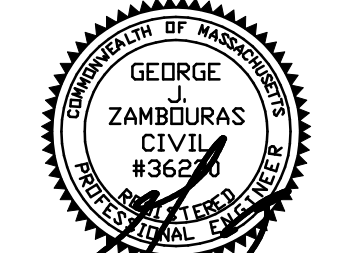
PLANT LIST			
QTY.	SYMBOL	COMMON NAME (BOTANICAL NAME)	SIZE
11	BN	RIVER BIRCH (BETULA NIGRA)	2 1/2 - 3" CAL.
6	FP	GRENN ASH (FRAXINUS PENNSYLVANICA)	2 1/2 - 3" CAL.
6	GT	GLEDITSIA TRIACANTHOS 'SHADEMASTER' (SHADEMASTER HONEYLOCUST)	2 1/2 - 3" CAL.
5	CAM	SILKY DOGWOOD (CORNUS AMOMUM)	2-3' HT
27	TO	DARK AMERICAN ARBORVITAE (THUJA OCCIDENTALIS)	3-4' HT
58	IG	SHAMROCK INKBERRY (ILEX GLABRA)	18-24" HT
20	MP	MYRICA PENNSYLVANICA (BAYBERRY)	18-24" HT
10	IVH	ITEA VIRGINICA 'HENRY'S GARNET' (HENRY'S GARNET VIRGINIA SWEETSPIRE)	18-24" HT
27	WFG	WEIGELA FLORIDA 'GHOST' (GHOST WEIGELA)	2 GAL.
36	JH	JUNIPERUS HORIZONTALIS (CREEPING JUNIPER)	2 GAL.
21	HS	HERMERCALLIS (STELLA D'ORO DAYLILY)	1 GAL.
7	SP	CUP PLANT (SILPHIUM PERFOLIATUM)	1 GAL.
4	VP	COMMON BLUE VIOLET (VIOLA PAPILIONACEA)	1 GAL.
6	EM	JOE PYE WEED (EUPATORIUM MACULATUM)	1 GAL.



N/F
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5 HALE STREET
MAP 53 BLOCK 83 LOT 4A

N/F
NEWBURYPORT ASSEMBLY OF GOD
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13 HALE STREET
MAP 53 BLOCK 83 LOT 3A

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George J. Zambouras
Date
OCT. 12, 2017

**PARKING IMPROVEMENTS
FOR HOPE
COMMUNITY CHURCH
AT
11 HALE STREET
IN
NEWBURYPORT, MASS.**

LANDSCAPE PLAN

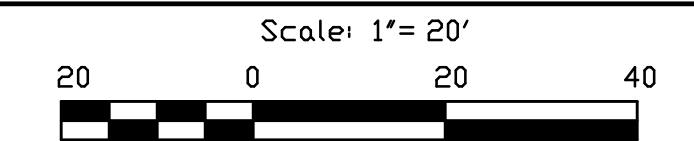
PREPARED FOR:
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11 HALE STREET
NEWBURYPORT, MASSACHUSETTS

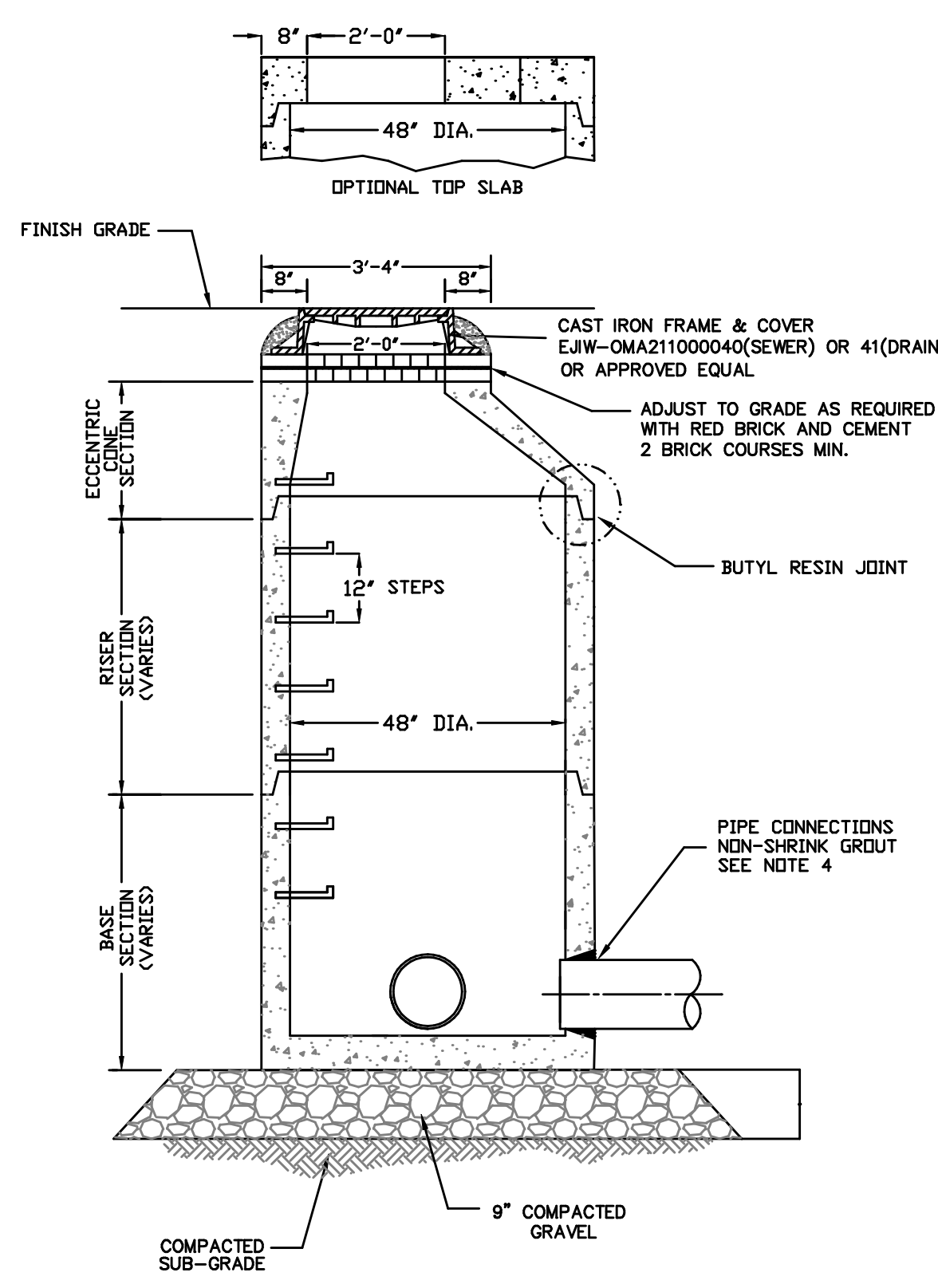
ENGINEER:
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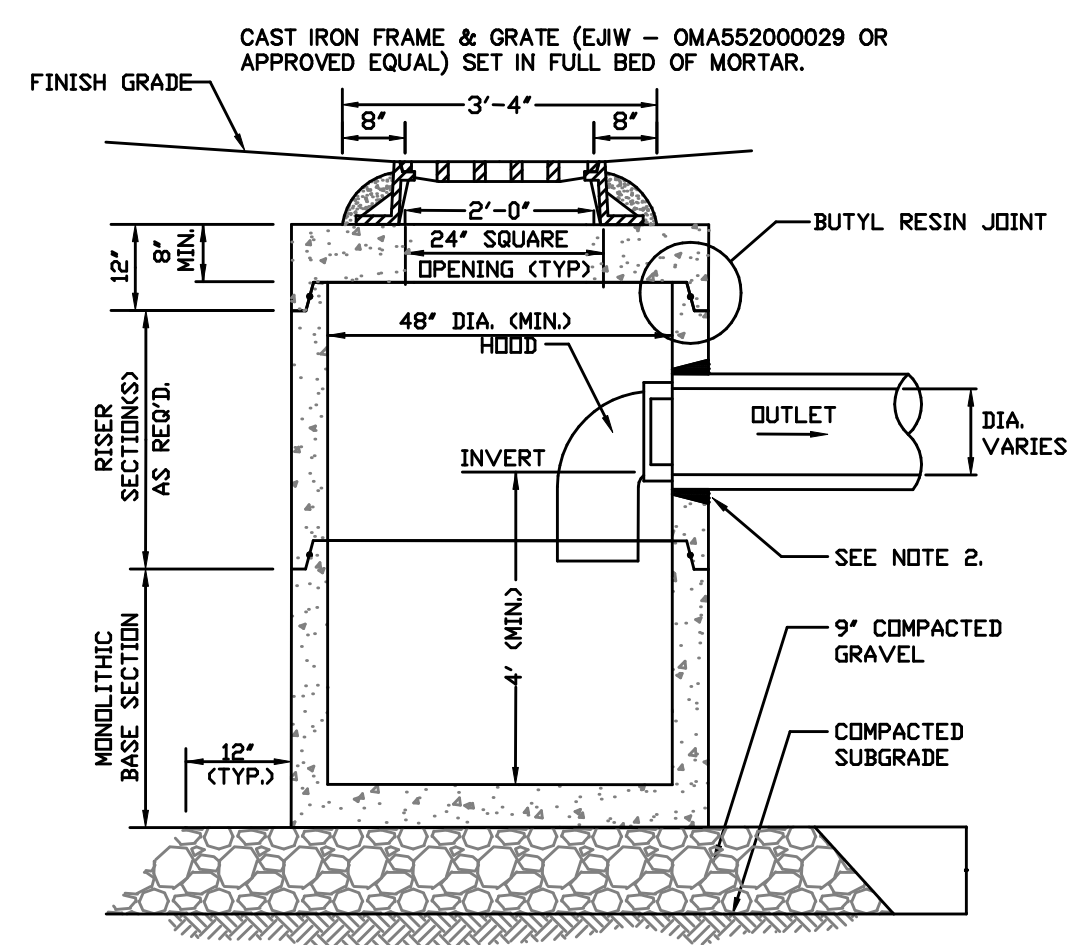
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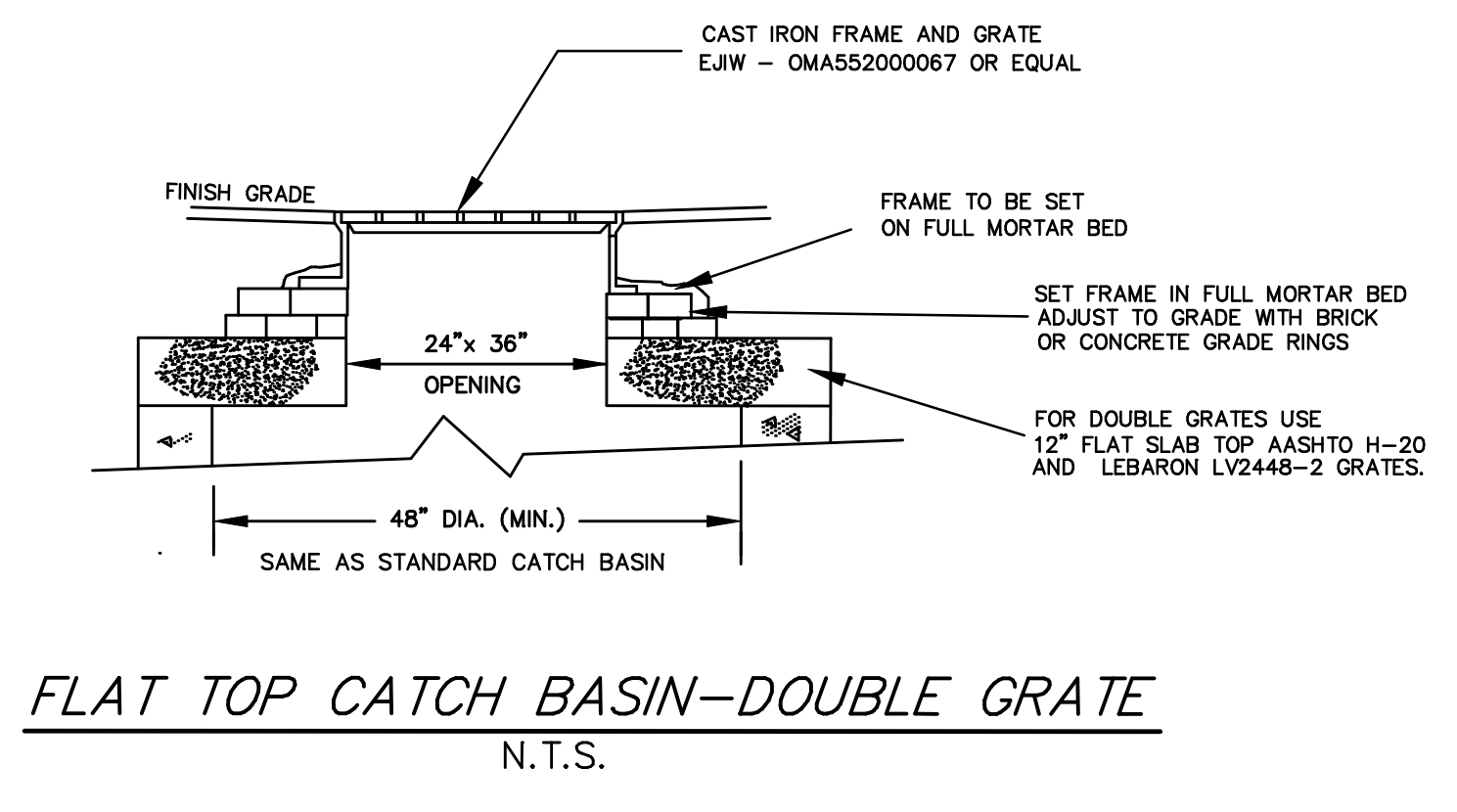


DRAIN MANHOLE
N.T.S.

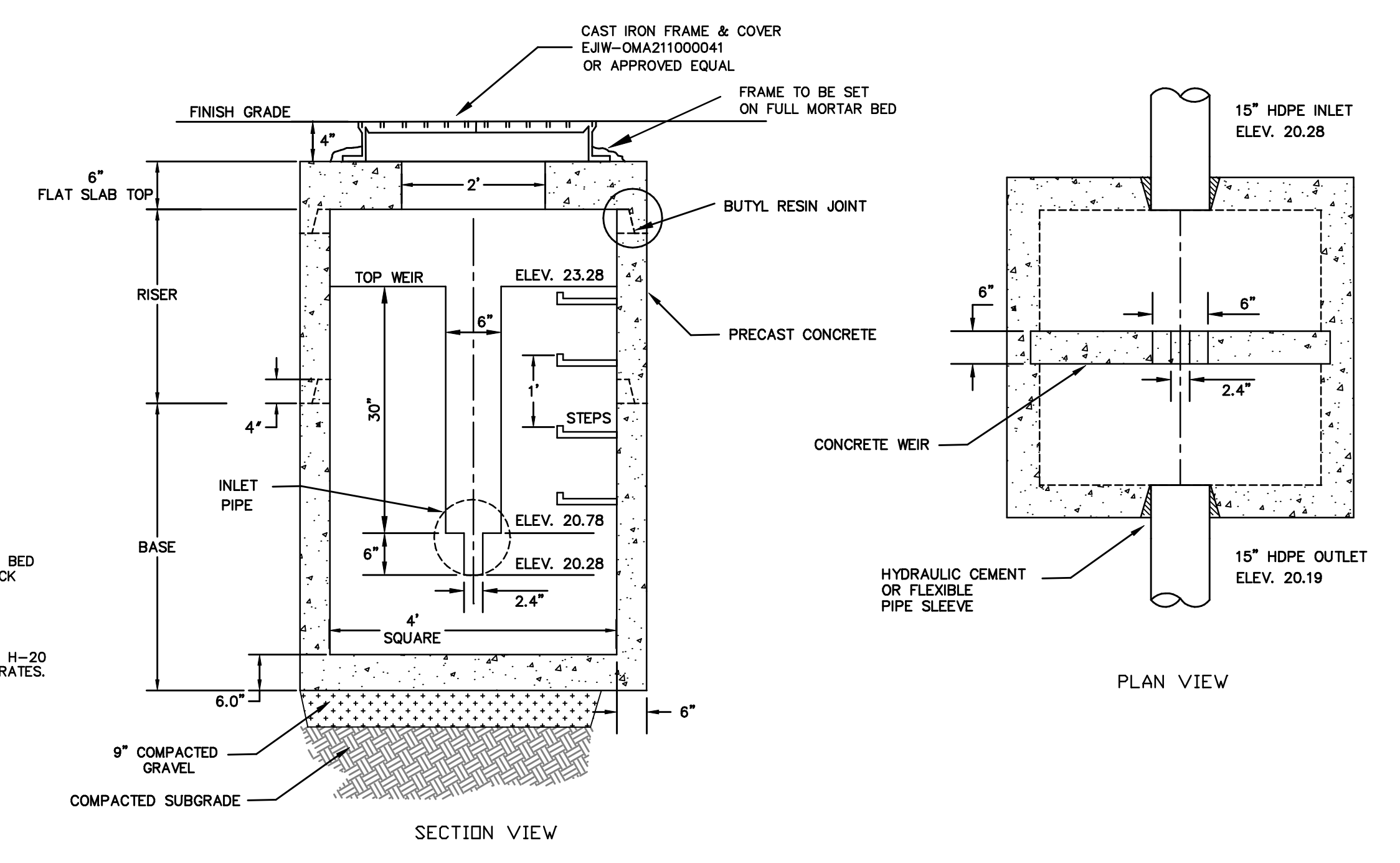
- PRECAST STRUCTURES GENERAL NOTES:**
1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
 2. REINFORCED STEEL CONFORMS TO LATEST ASTM A185 SPEC. 0.12 SQ. IN./LINEAL FT. AND 0.12 SQ. IN. (BOTH WAYS) BASE BOTTOM.
 3. H-20 DESIGN LOADING PER AASHTO HS-20-44; ASTM C478 SPEC FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."
 4. SECTION JOINTS SHALL BE BUTYL RUBBER CONFORMING TO LATEST ASTM C990 SPEC.
 5. STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC STEP CONFORMS TO LATEST ASTM C478 SPEC.
 6. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS OR FLEXIBLE PIPE SLEEVE.
 7. BASE SECTION SHALL BE ONE-POUR MONOLITHIC.



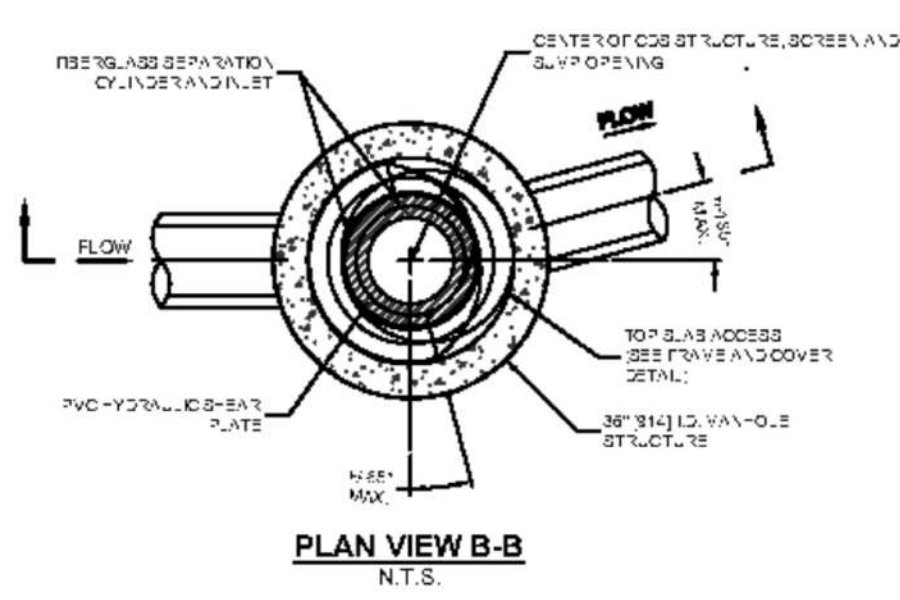
CATCH BASIN
N.T.S.



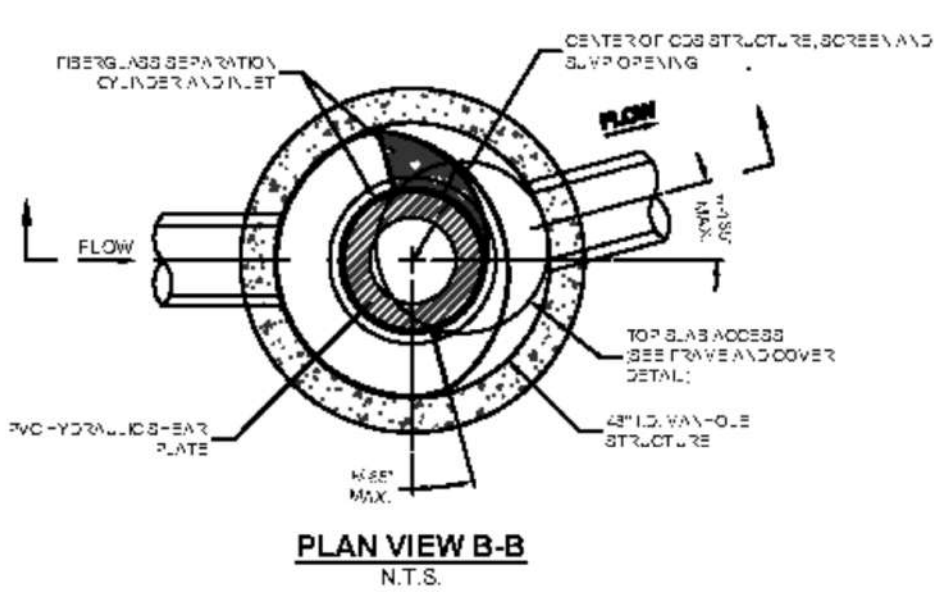
FLAT TOP CATCH BASIN-DOUBLE GRATE
N.T.S.



OUTLET CONTROL STRUCTURE-4' SQUARE MANHOLE
N.T.S.



PLAN VIEW B-B
N.T.S.

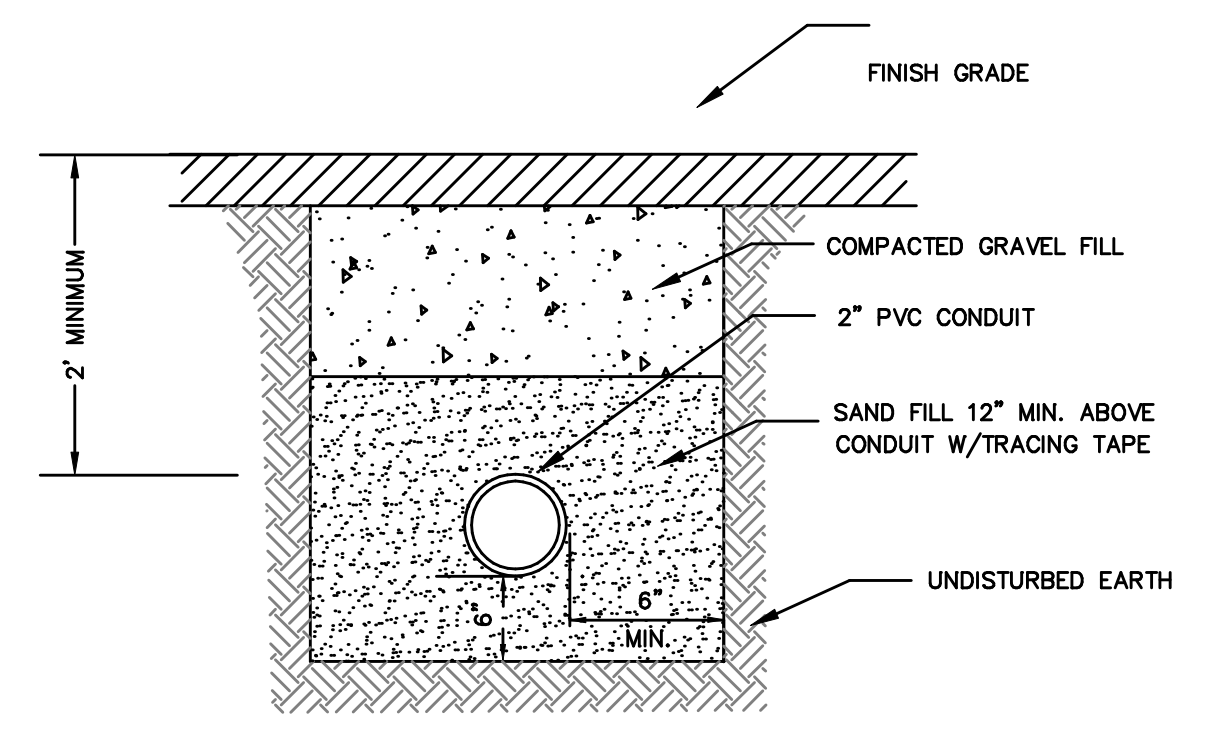


PLAN VIEW B-B
N.T.S.

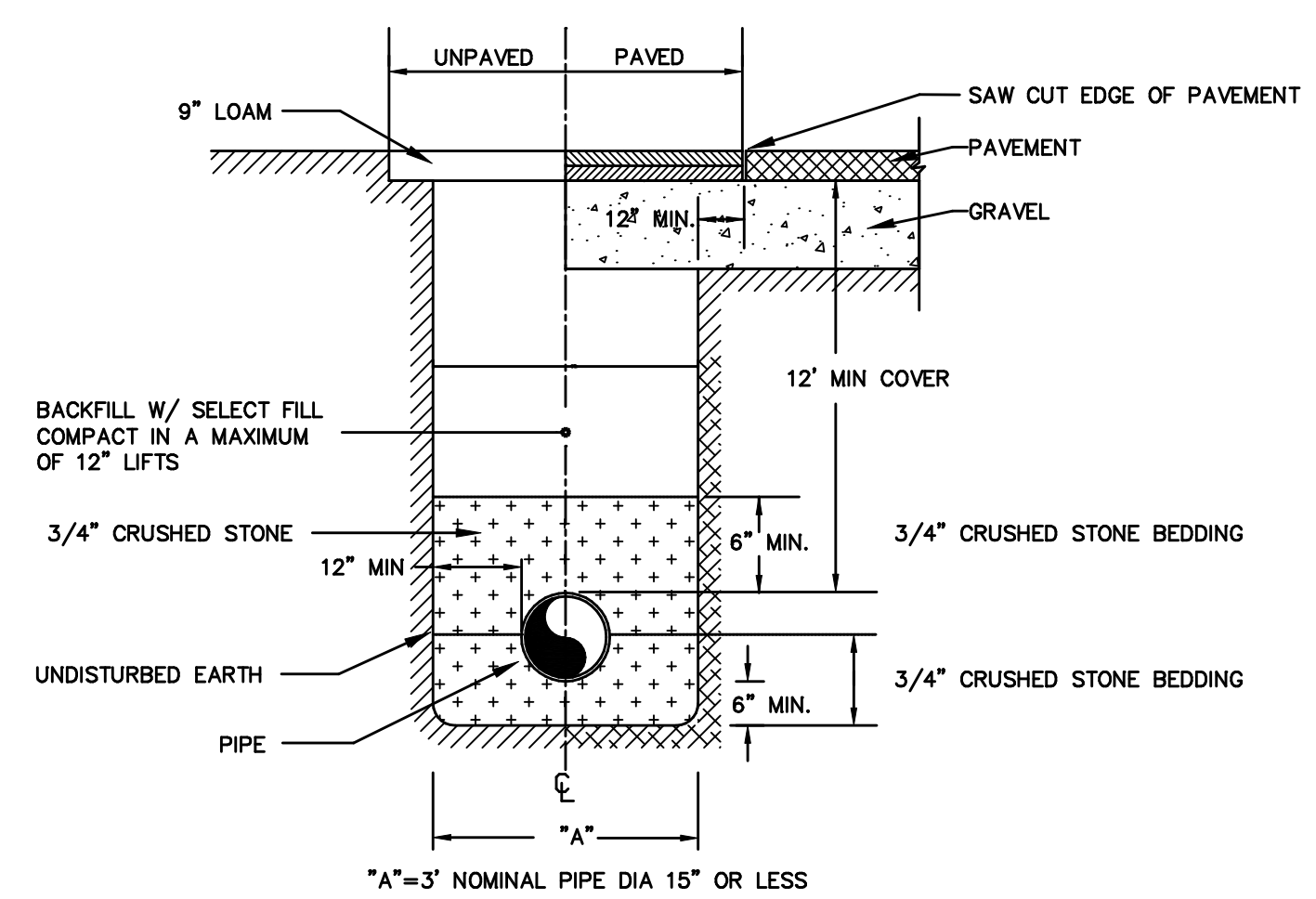


FRAME AND COVER
N.T.S.

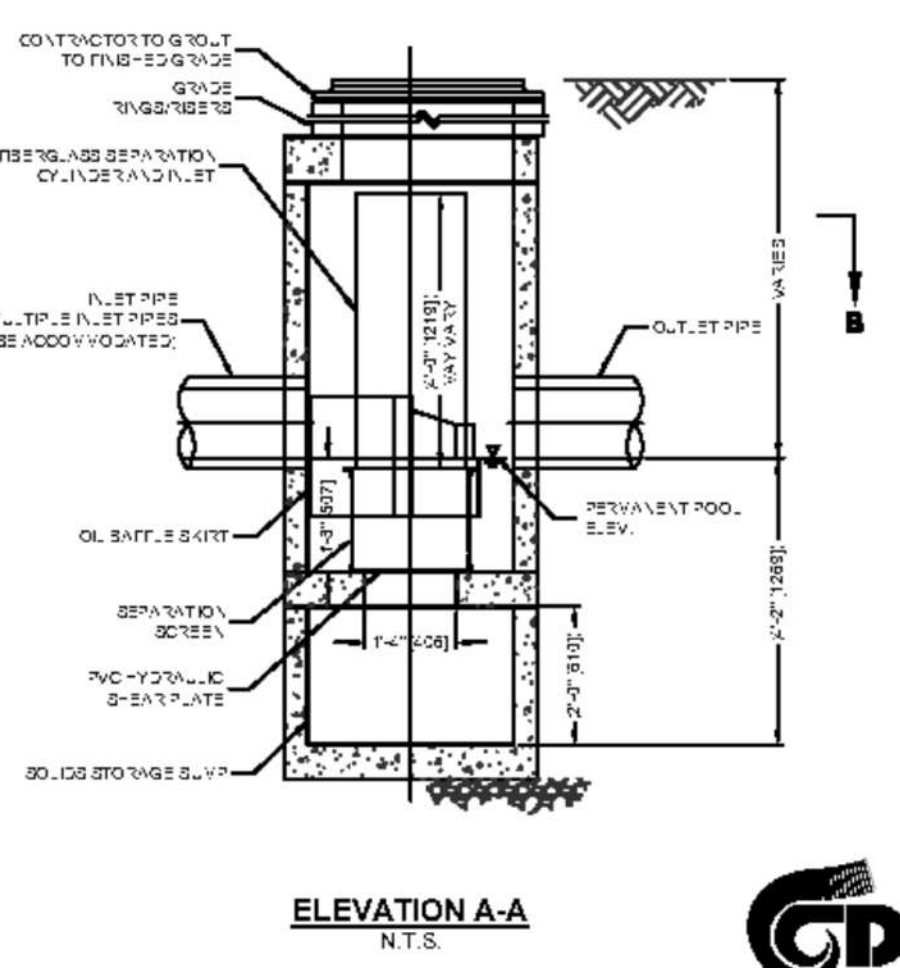
- GENERAL NOTES:**
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE: www.contechES.com
 3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 4. STRUCTURE SHALL MEET AASHTO H-20 LOAD RATING, ASSUMING EARTH COVER OF 0'-2' AND GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M199 AND BE CAST WITH THE CONTECH LOGO.
 5. IF REQUIRED, PVC HYDRAULIC SEPARATION 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 C478 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 LAIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



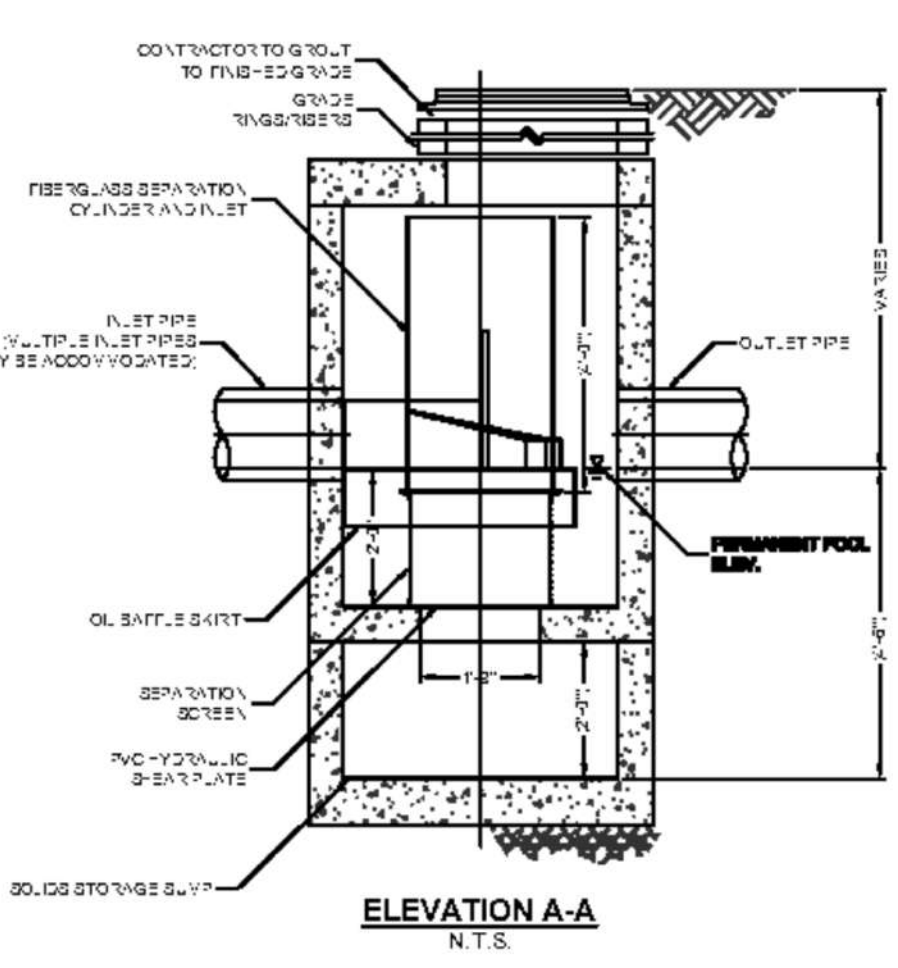
ELECTRICAL CONDUIT TRENCH
N.T.S.



TYPICAL TRENCH DETAIL SECTION
N.T.S.



ELEVATION A-A
N.T.S.

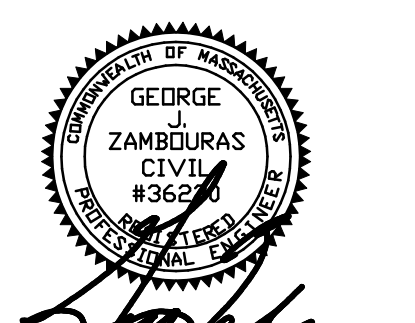


ELEVATION A-A
N.T.S.

WQ-2
CDS1515-3-C (INLINE)
N.T.S.

WQ-1
CDS2015-4-C (INLINE)
N.T.S.

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George J. Zambouras
Date: OCT. 12, 2017

**PARKING IMPROVEMENTS
FOR HOPE
COMMUNITY CHURCH
AT
11 HALE STREET
IN
NEWBURYPORT, MASS.**

DETAILS

PREPARED FOR:
THE HOPE COMMUNITY CHURCH OF NEWBURYPORT
11 HALE STREET
NEWBURYPORT, MASSACHUSETTS

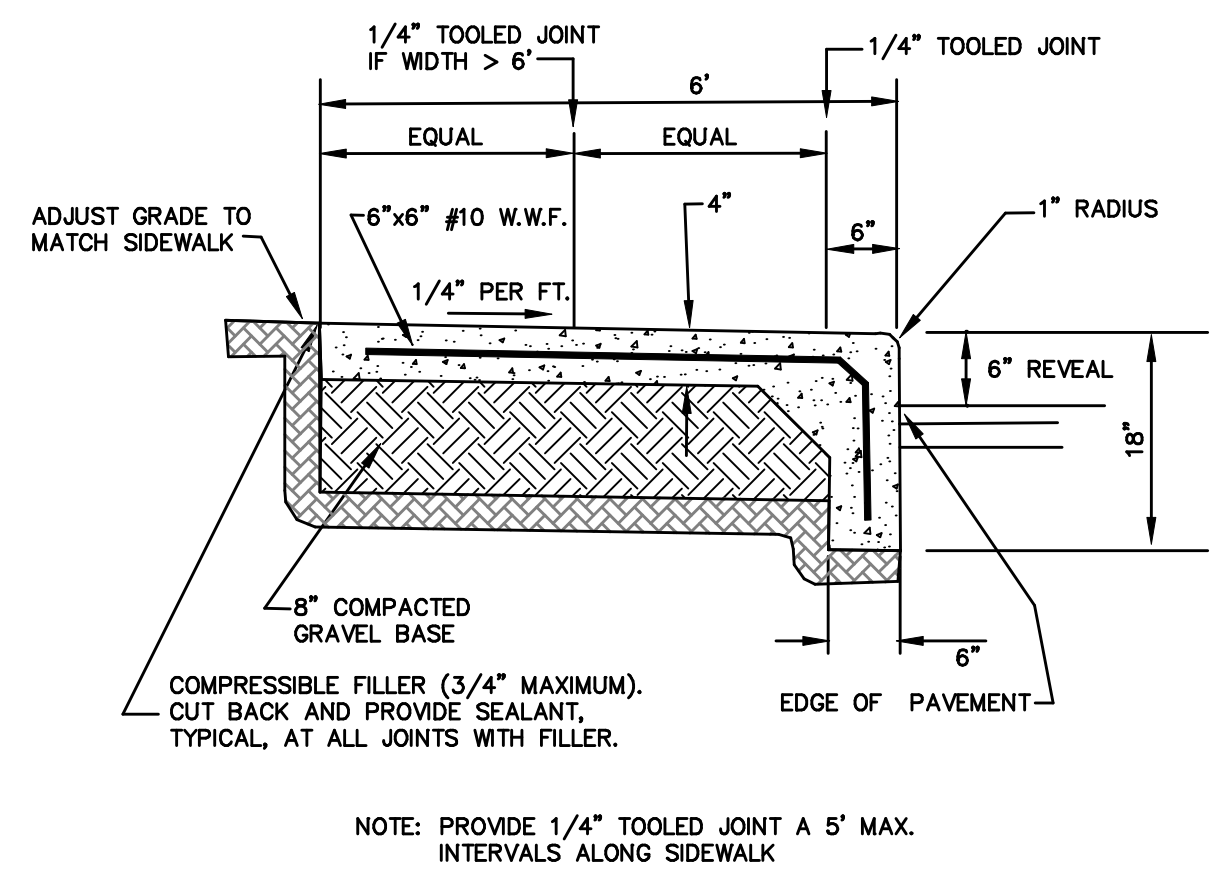
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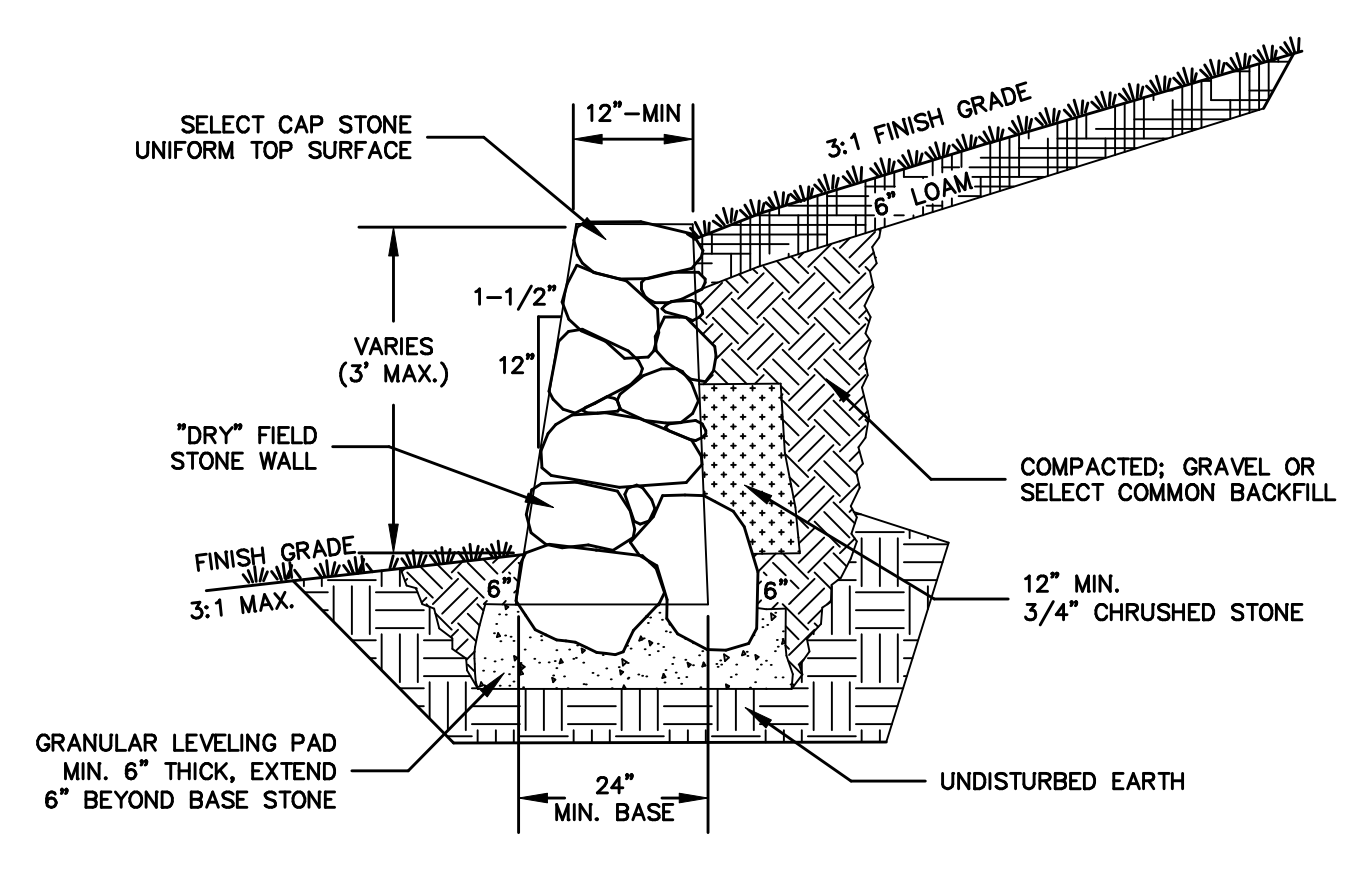
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revision #	date	description

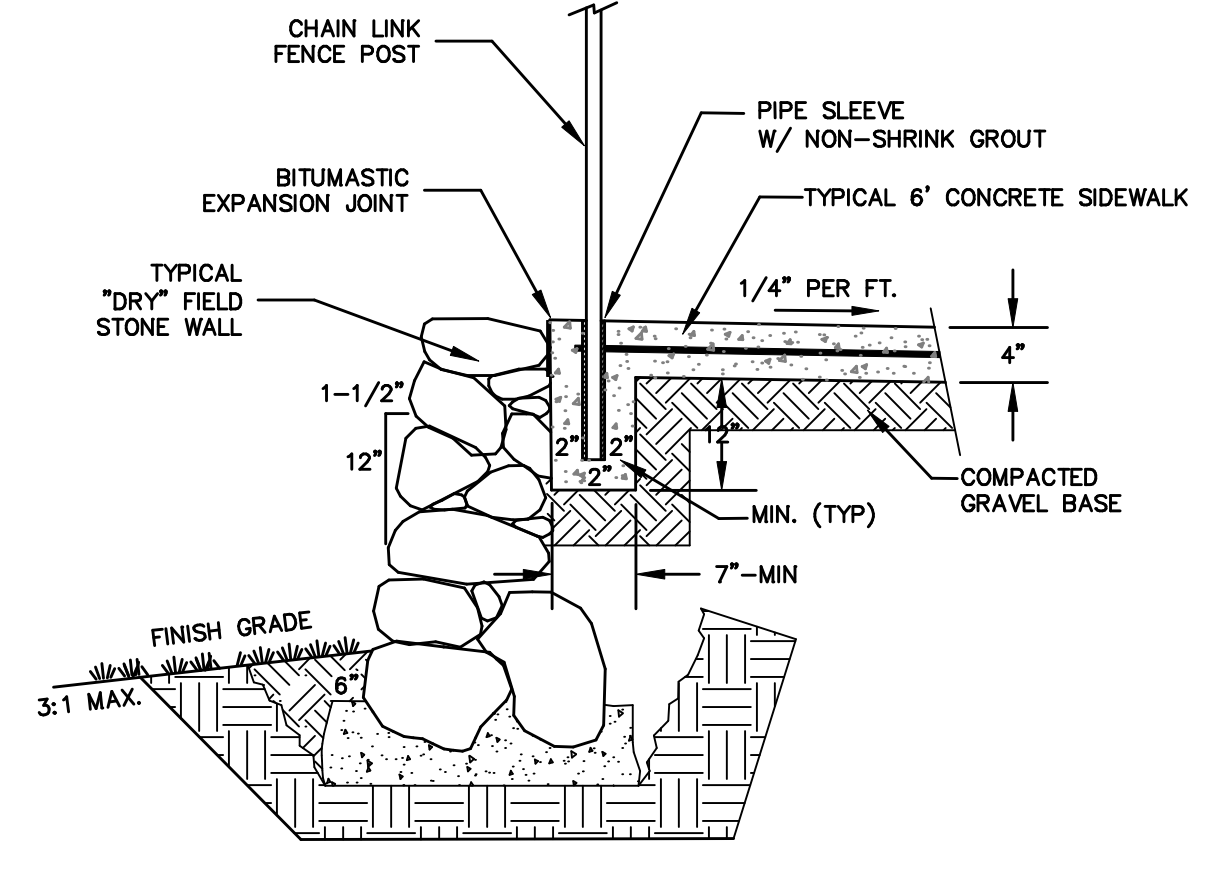




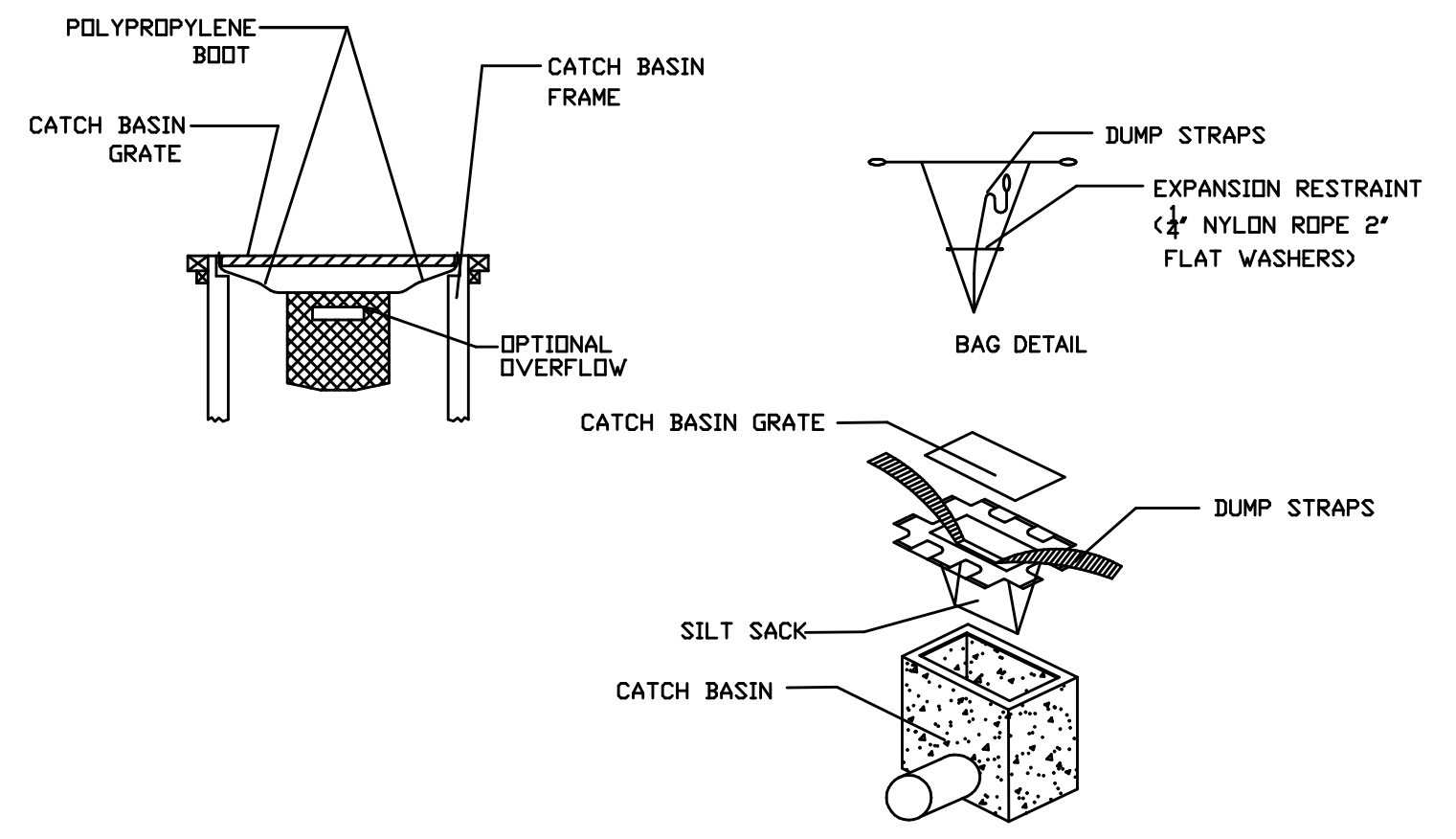
CONCRETE CURB/SIDEWALK
N.T.S.



TYPICAL SECTION - STONE RETAINING WALL
N.T.S.

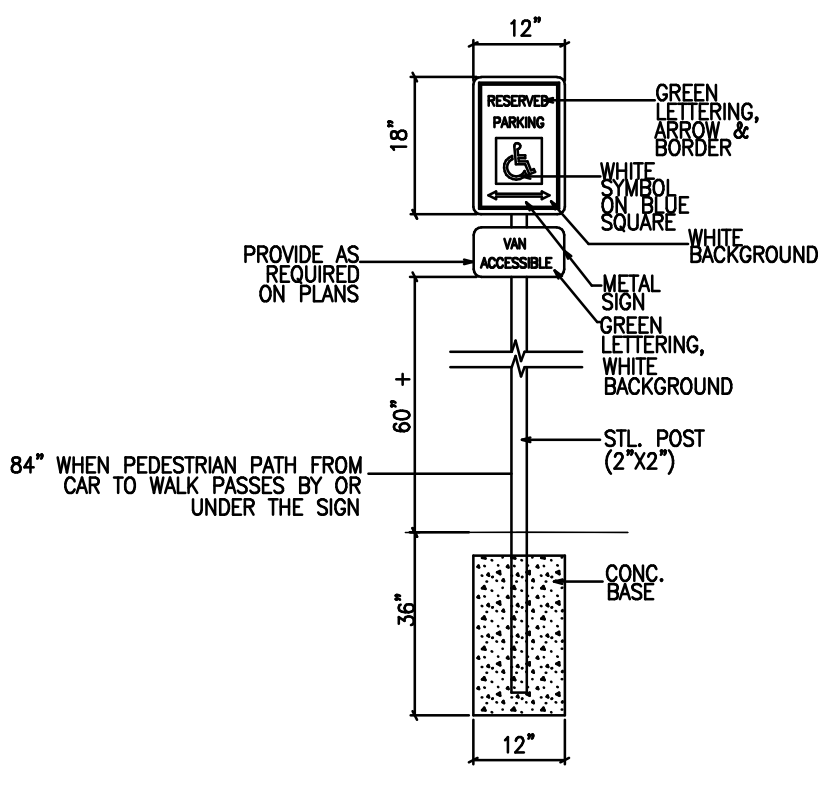


TYPICAL SECTION CHAIN LINK POST IN CONCRETE SIDEWALK W/ WALL
N.T.S.

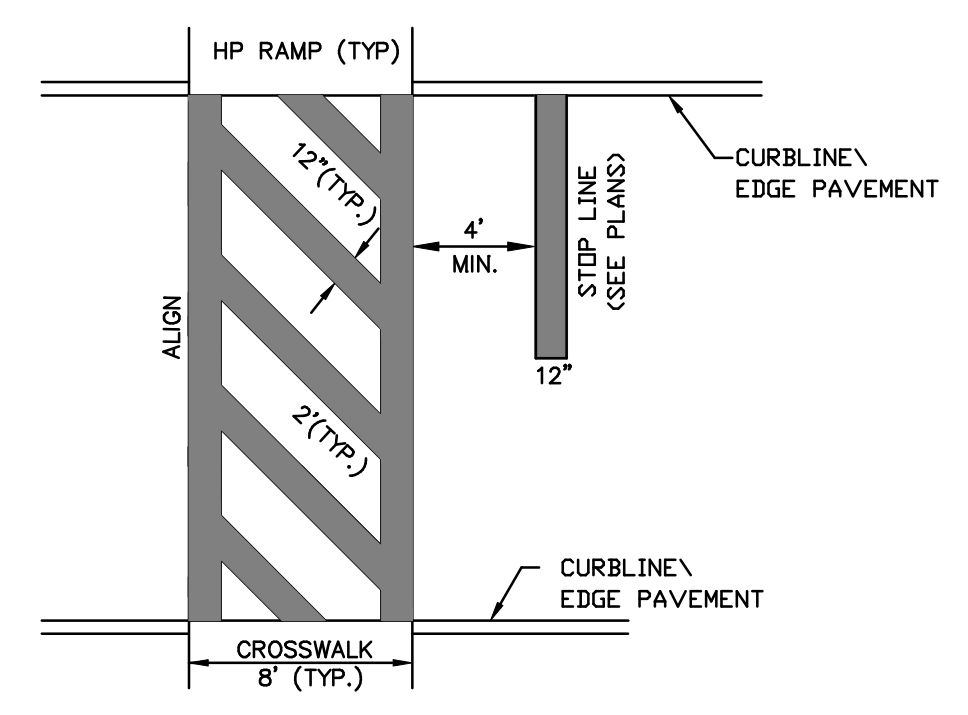


MAINTENANCE SHALL OCCUR WHEN NECESSARY. SILT SACKS SHALL BE CLEANED ONCE THE BAG IS FILLED HALF WAY WITH DEBRIS. CONTRACTOR SHALL REMOVE SILT SACK AND INSTALL A NEW UNIT. CONTENTS OF SILT SACK SHALL NOT BE EMPTIED INTO THE CATCH BASIN.

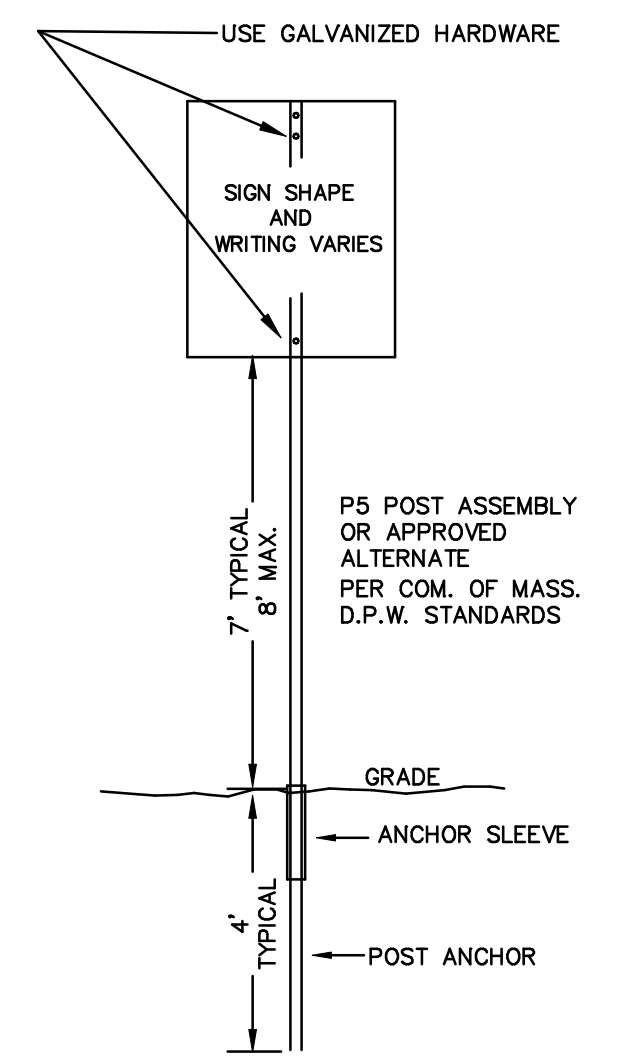
CATCH BASIN W/ SILT SACK INLET PROTECTION
N.T.S.



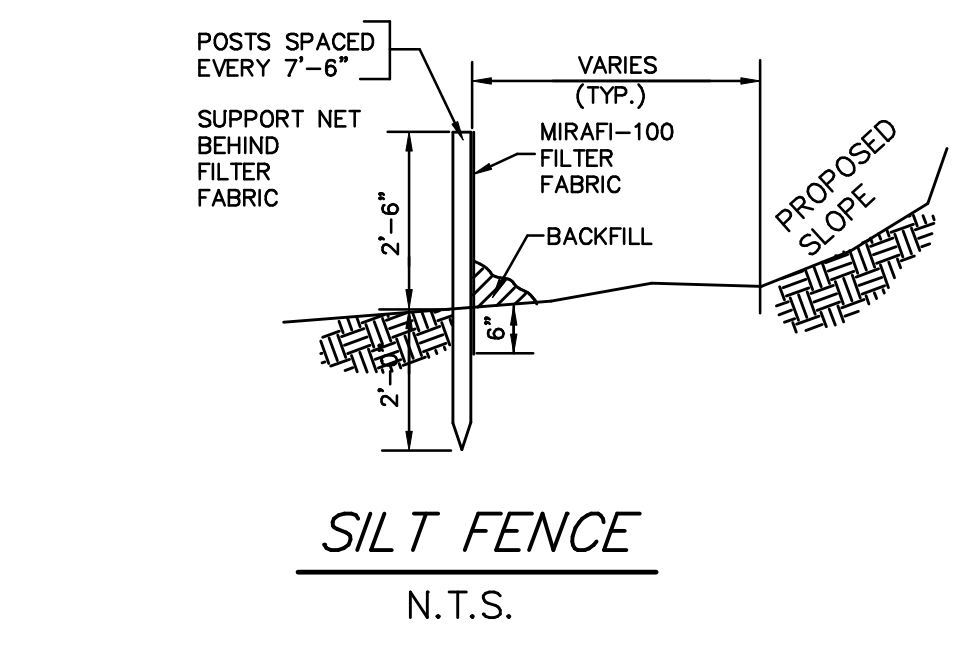
HANDICAP PARKING SIGN
N.T.S.



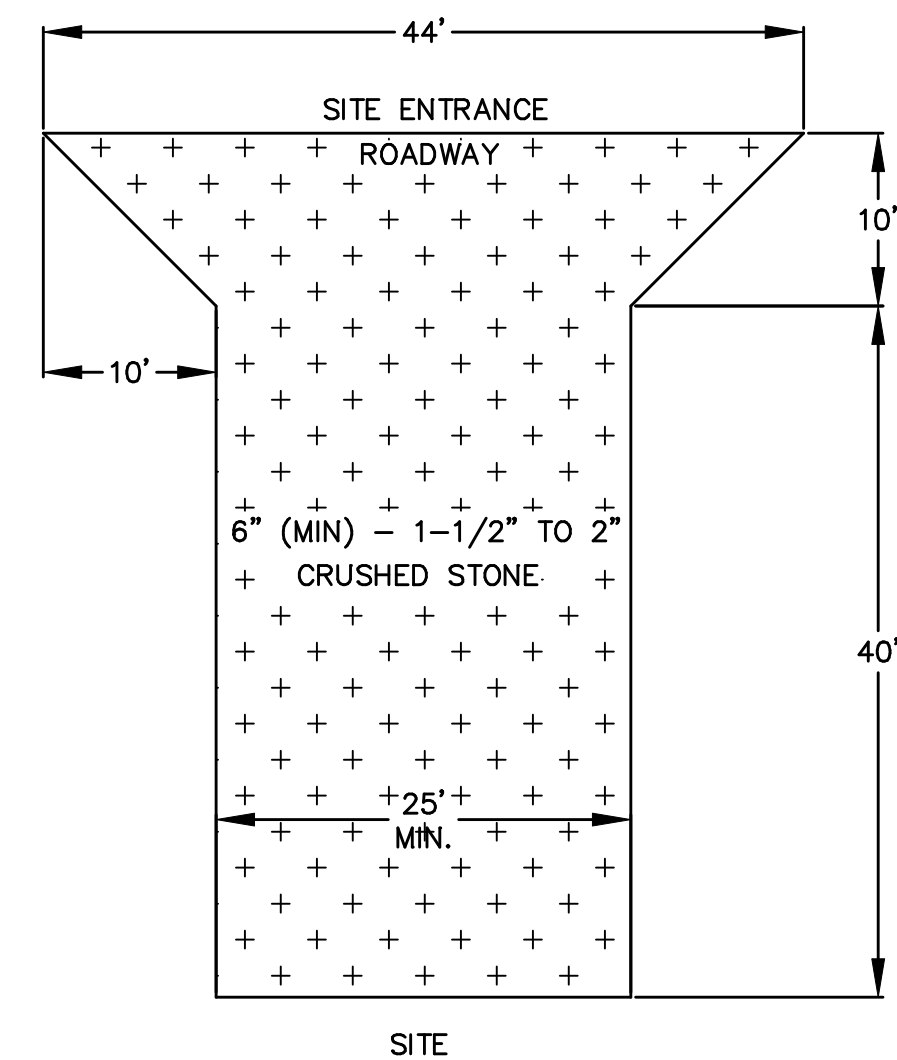
CROSSWALK
N.T.S.



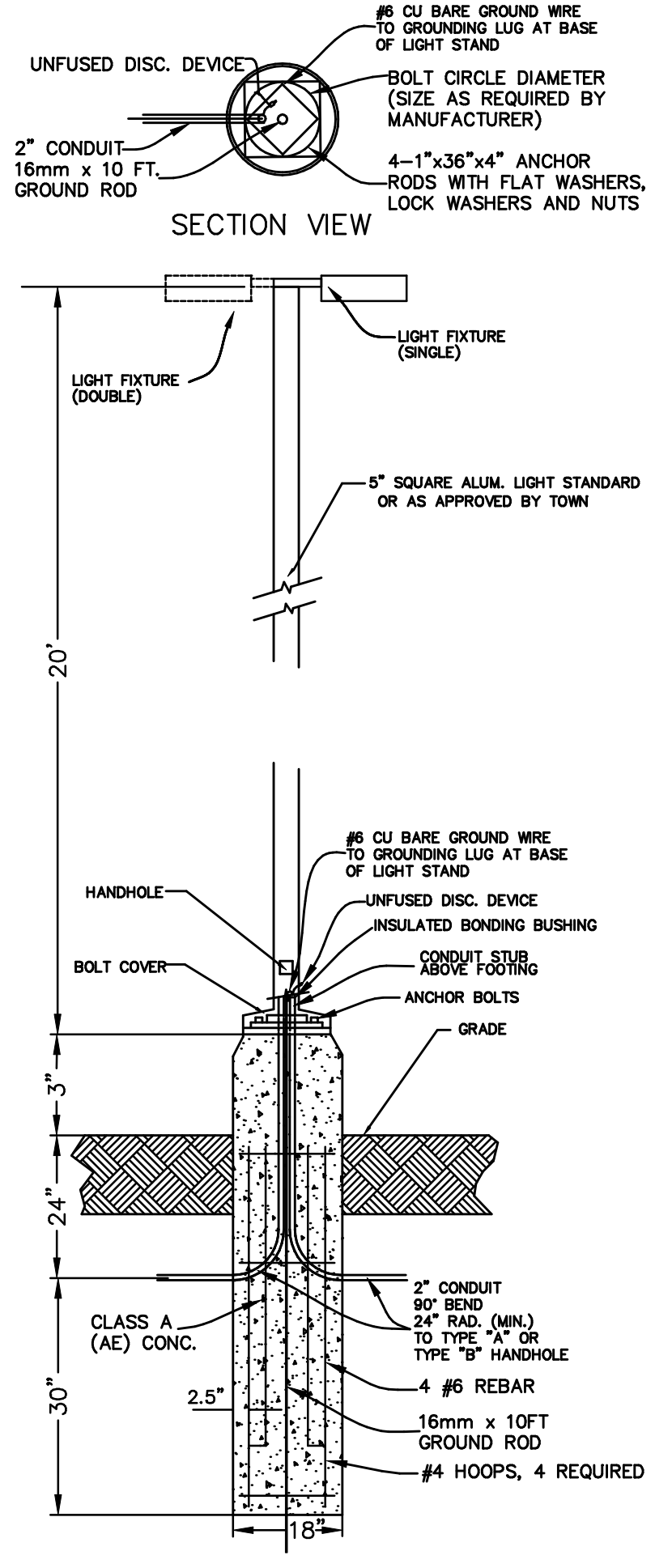
TYPICAL SMALL SIGNS
N.T.S.



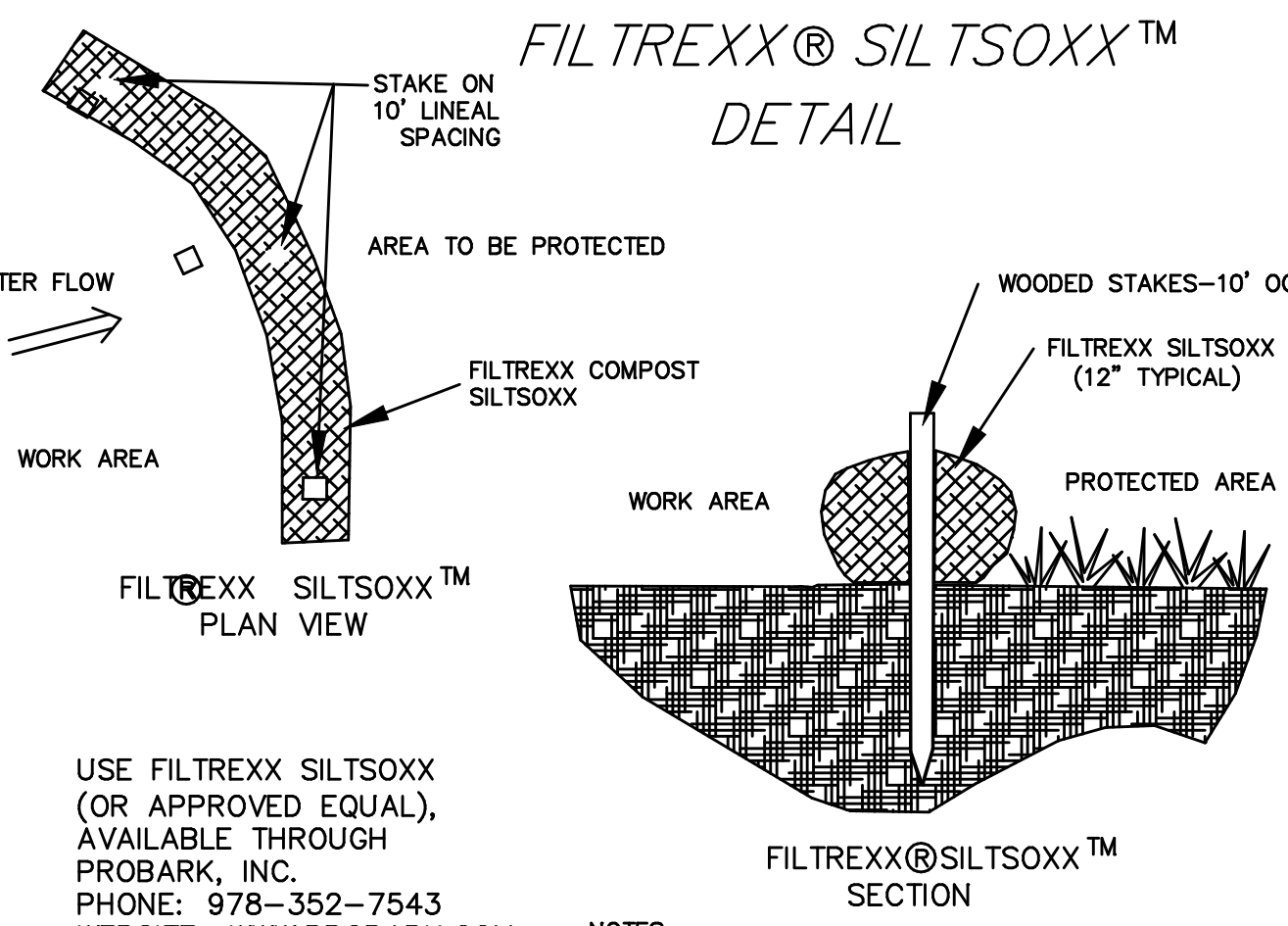
SILT FENCE
N.T.S.



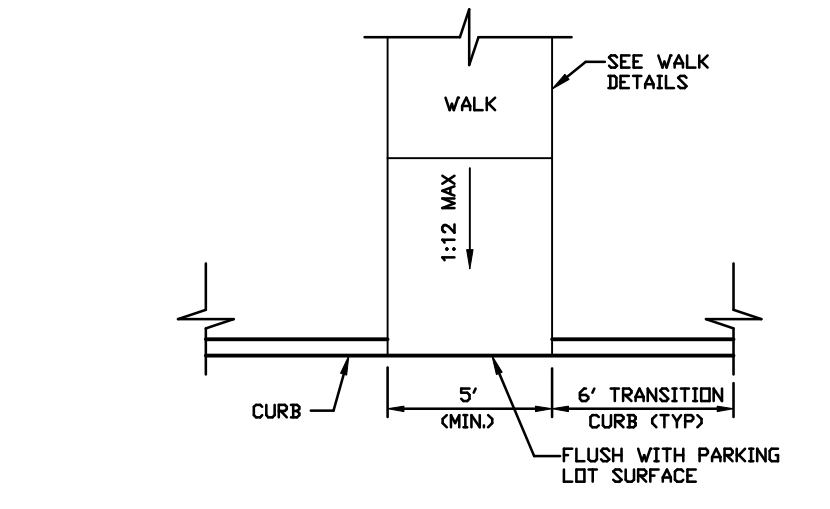
STONED ENTRANCE
N.T.S.



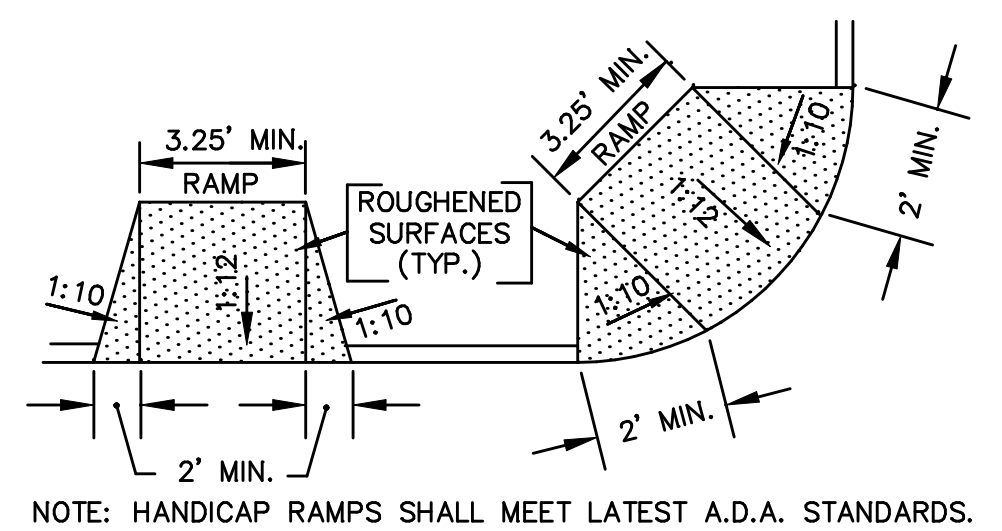
TYPICAL LIGHT STANDARD & BASE
N.T.S.



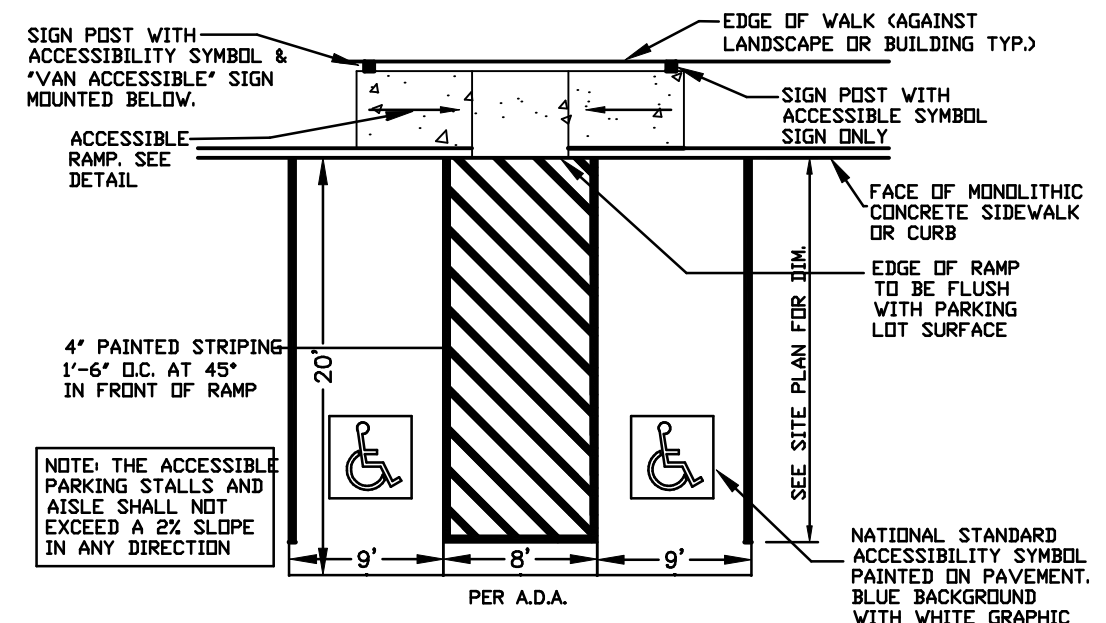
FILTREXX SILTSOXX™ DETAIL
N.T.S.



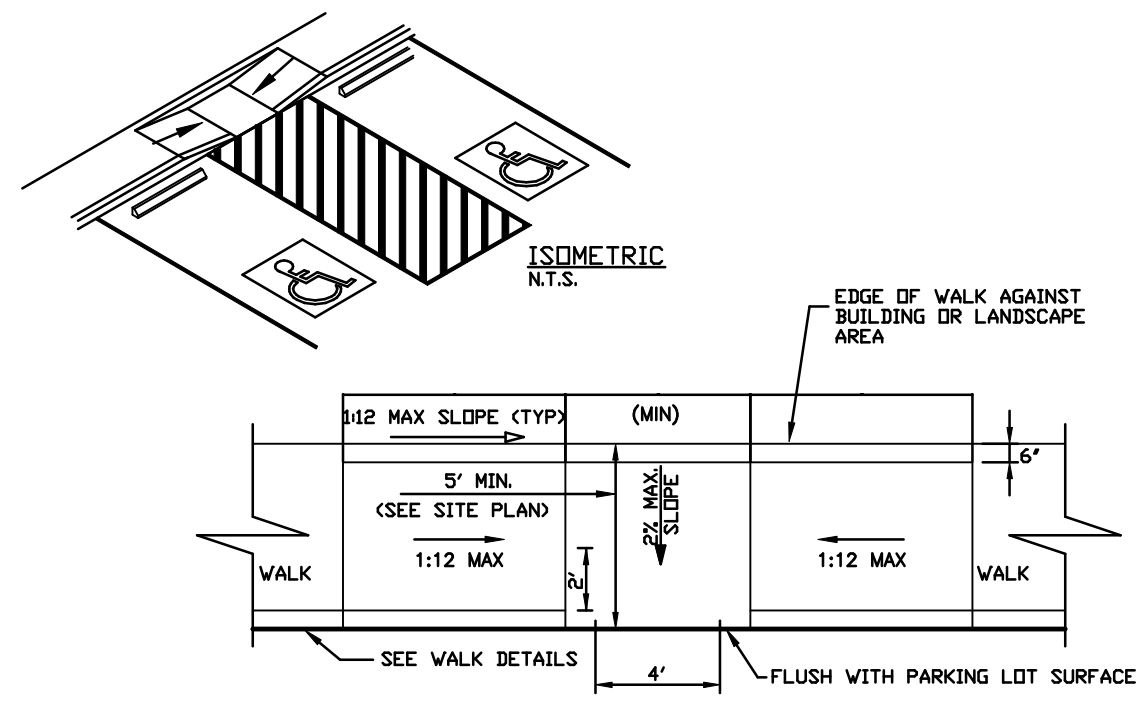
ON-SITE ACCESSIBLE RAMP
N.T.S.



HANDICAP RAMP
N.T.S.

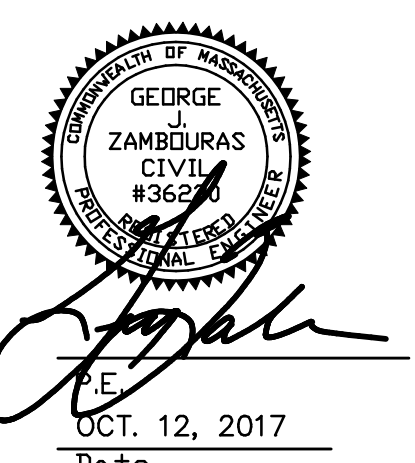


ACCESSIBLE PARKING STALLS
N.T.S.



ACCESSIBLE PARKING RAMP
N.T.S.

I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF IT CONFORMS WITH TECHNICAL, ETHICAL AND PROCEDURAL STANDARDS FOR THE PRACTICE OF PROFESSIONAL ENGINEERING IN THE COMMONWEALTH OF MASSACHUSETTS.



PARKING IMPROVEMENTS FOR HOPE COMMUNITY CHURCH AT 11 HALE STREET IN NEWBURYPORT, MASS.

DETAILS

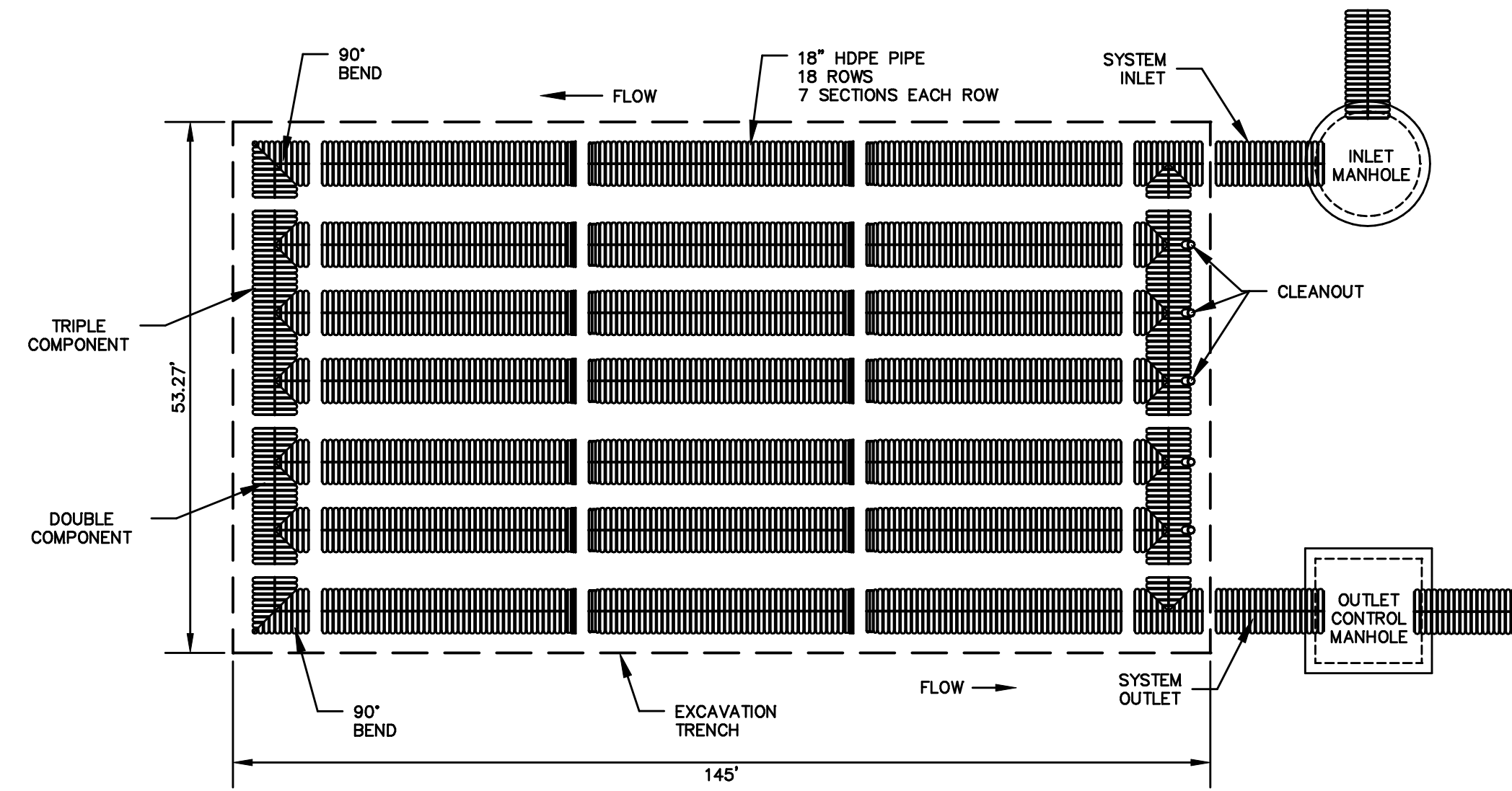
PREPARED FOR: THE HOPE COMMUNITY CHURCH OF NEWBURYPORT
11 HALE STREET
NEWBURYPORT, MASSACHUSETTS

ENGINEER: ATLANTIC ENGINEERING & SURVEY CONSULTANTS INC.
97 TENNEY STREET - SUITE 5 - GEORGETOWN, MA 01833
PHONE: 978-352-7870 FAX: 978-352-9940

DRAWING FILE: \SEQ93\HOPECHURCH-FEB-2017.DWG

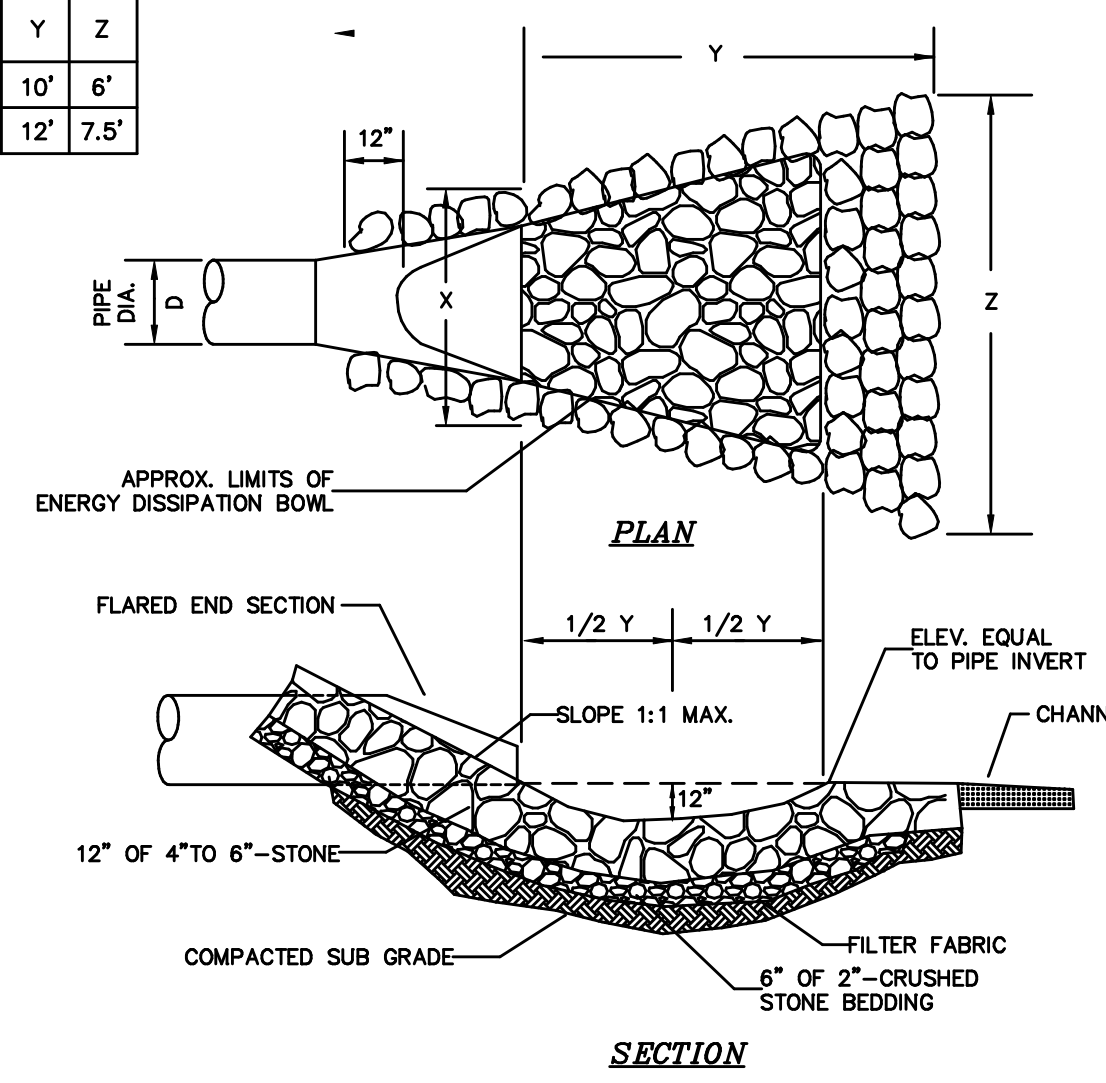
revision #	date	description



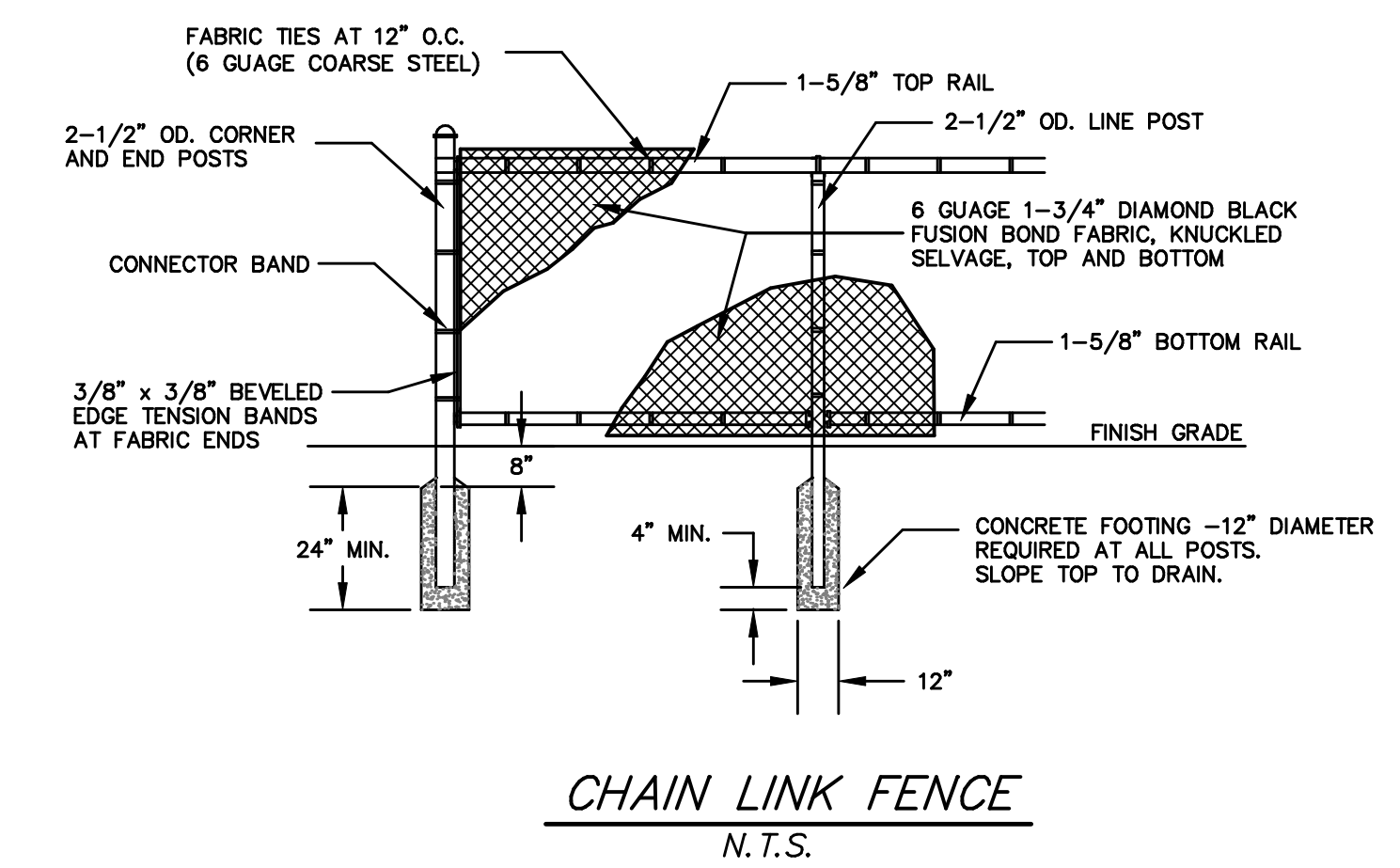


PLAN VIEW

PIPE DIA. "D"	X	Y	Z
12"	4'	10'	6'
18"	5.5'	12'	7.5'

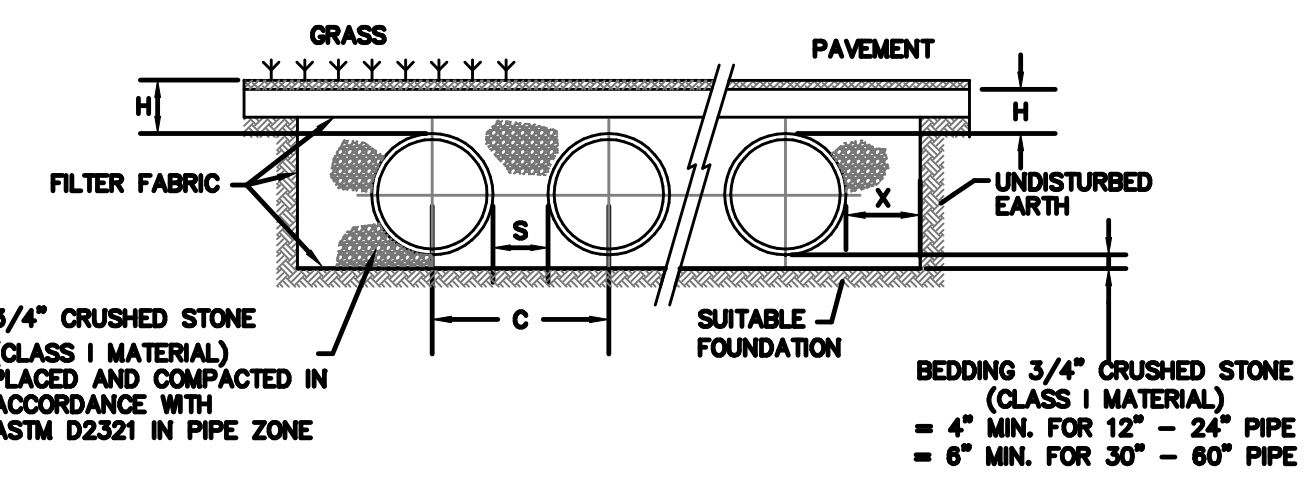


FLARED END SECTION WITH STONED SEDIMENT TRAP
N.T.S.



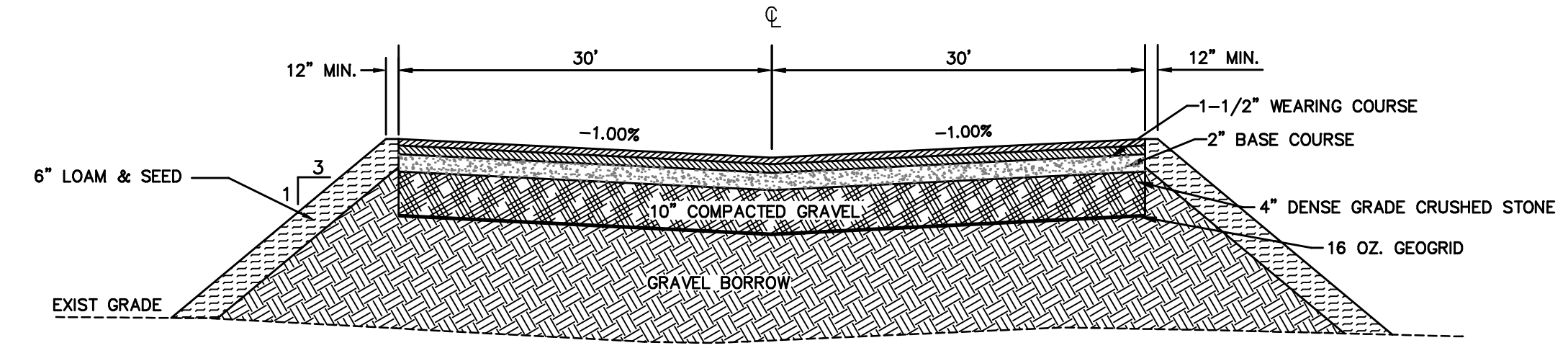
CHAIN LINK FENCE
N.T.S.

- NOTES:
- ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
 - ALL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES.
 - FILTER FABRIC:** A GEOTEXTILE FABRIC SHALL BE USED AS SPECIFIED BY THE ENGINEER TO PREVENT THE MIGRATION OF FINES FROM THE NATIVE SOIL INTO THE SELECT BACKFILL MATERIAL.
 - FOUNDATION:** WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
 - BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I OR II. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" FOR 4"-24"; 6" FOR 30"-60".
 - INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE CLASS I OR II IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
 - MINIMUM COVER:** MINIMUM COVER OVER ALL SYSTEMS IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" UP TO 36" DIAMETER PIPE AND 24" OF COVER FOR 42" - 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.
- * CLASS I BACKFILL SHALL BE REQUIRED AROUND 60" DIAMETER FITTINGS.

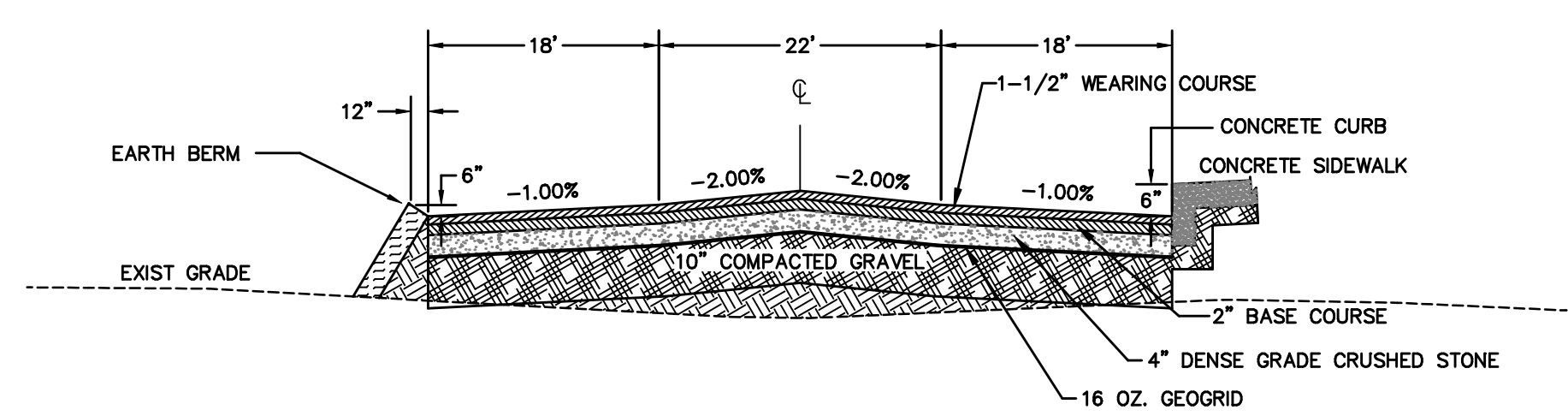


NOMINAL DIAMETER	NOMINAL O.D.	TYPICAL SPACING "S"	NOMINAL SPACING "C"	TYPICAL SIDE WALL "X"	H (NON-TRAFFIC)	H (TRAFFIC)
12"	14.5"	11"	25.5"	8"	12"	12"
15"	18"	11.5"	29.0"	8"	12"	12"
18"	21"	17.0"	38.0"	9"	12"	12"
24"	28"	14.0"	41.5"	10"	12"	12"
30"	36"	18"	53.0"	18"	12"	12"
36"	42"	22"	63.0"	18"	12"	12"
42"	48"	24"	72.0"	18"	12"	24"
48"	54"	25"	78.5"	18"	12"	24"
60"	67"	24"	90"	18"	12"	24"

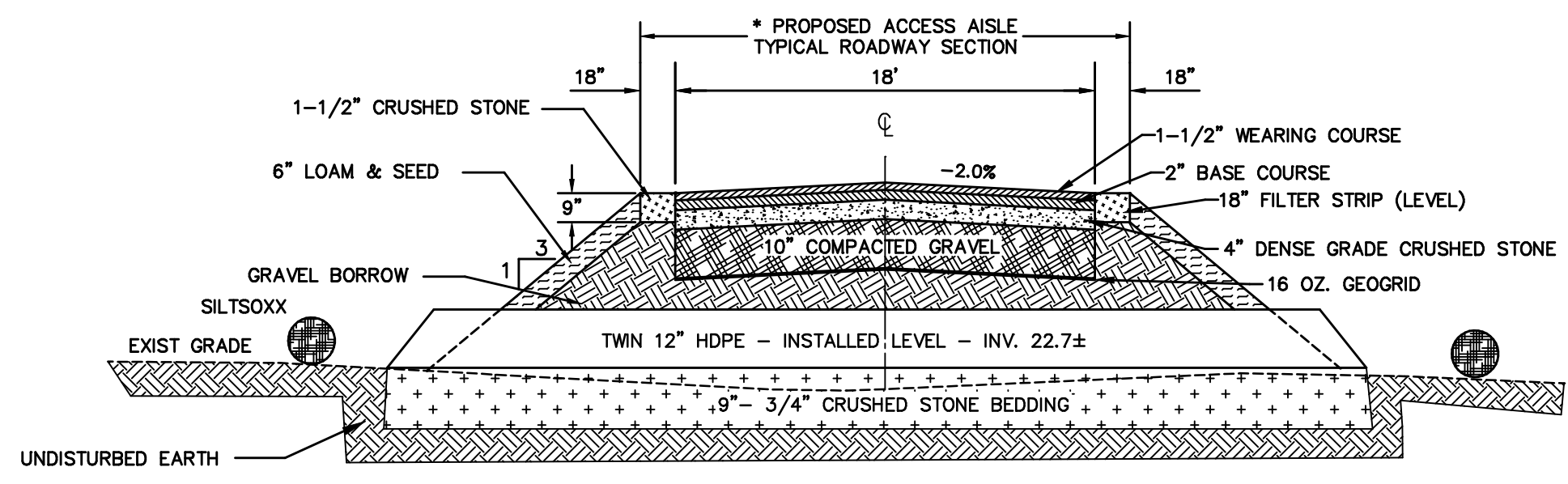
CROSS SECTION
DETENTION SYSTEM - ADS 18" Dia.
N.T.S.



PROPOSED PARKING AREA TYPICAL SECTION
N.T.S.



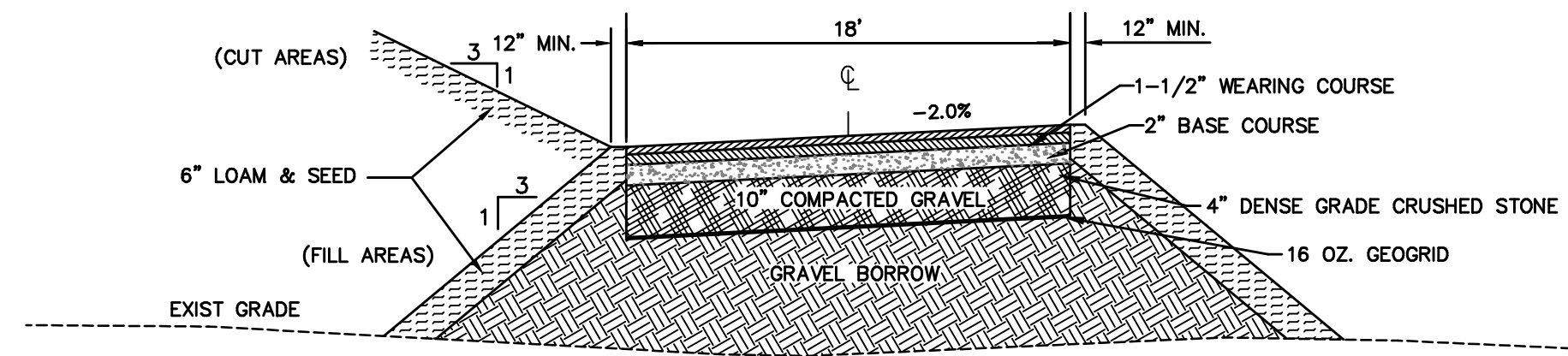
EXISTING ACCESS AISLE TYPICAL SECTION
N.T.S.



NOTE: WITHIN LIMITS OF ROADWAY ALL TOP SOIL AND UNSUITABLE FILL TO BE REMOVED AND REPLACED WITH GRAVEL BORROW.

* PROPOSED ACCESS AISLE TYPICAL ROADWAY SECTION: STA. 0+00 TO 0+90 AND STA. 2+80 TO 3+50

PROPOSED ACCESS AISLE SECTION - TWIN CULVERT CROSSING - STA. 0+35.6
N.T.S.

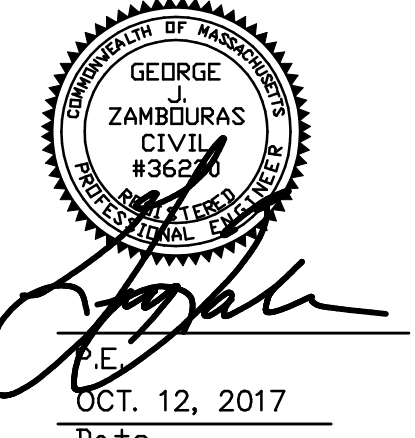


NOTE: WITHIN LIMITS OF ROADWAY ALL TOP SOIL AND UNSUITABLE FILL TO BE REMOVED AND REPLACED WITH GRAVEL BORROW.

* PROPOSED ACCESS AISLE TYPICAL ROADWAY SECTION: STA. 0+90 TO 2+80

PROPOSED ACCESS AISLE TYPICAL SECTION
N.T.S.

I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF IT CONFORMS WITH TECHNICAL, ETHICAL AND PROCEDURAL STANDARDS FOR THE PRACTICE OF PROFESSIONAL ENGINEERING IN THE COMMONWEALTH OF MASSACHUSETTS.



PARKING IMPROVEMENTS
FOR HOPE
COMMUNITY CHURCH
AT
11 HALE STREET
IN
NEWBURYPORT, MASS.

DETAILS

PREPARED FOR:
THE HOPE COMMUNITY CHURCH OF NEWBURYPORT
11 HALE STREET
NEWBURYPORT, MASSACHUSETTS

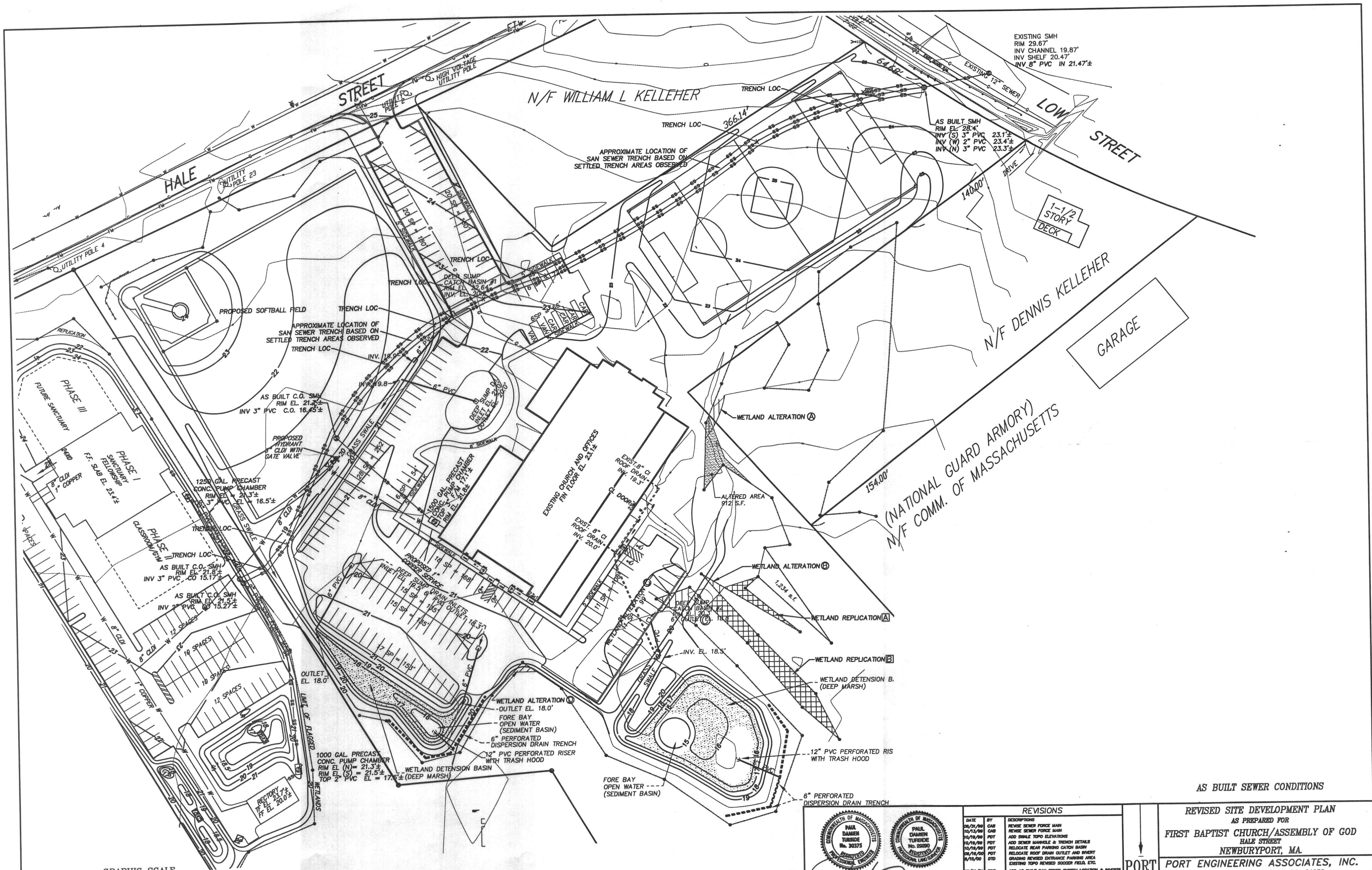
ENGINEER:
ATLANTIC ENGINEERING & SURVEY CONSULTANTS INC.
97 TENNEY STREET - SUITE 5 - GEORGETOWN, MA 01833
PHONE: 978-352-7870 FAX: 978-352-9940

DRAWING FILE: \SEQ93\HDPECHURCH-FEB-2017.DWG

JOB NO. A1510-02 DATE: DEC. 14, 2017

revision #	date	description





EXISTING SMH
RIM 29.67'
INV CHANNEL 19.87'
INV SHELF 20.47'
INV 8" PVC IN 21.47'±

AS BUILT SMH
RIM EL 28.4'
INV (S) 3" PVC 23.1'±
INV (W) 2" PVC 23.4'±
INV (N) 3" PVC 23.3'±

APPROXIMATE LOCATION OF
SAN SEWER TRENCH BASED ON
SETTLED TRENCH AREAS OBSERVED

AS BUILT C.O. SMH
RIM EL 21.2'±
INV 3" PVC C.O. 16.45'±

AS BUILT C.O. SMH
RIM EL 21.3'±
INV 3" PVC CO 15.5'±

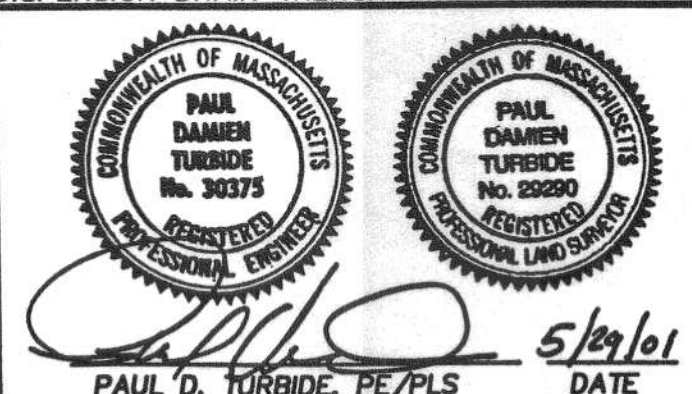
AS BUILT C.O. SMH
RIM EL 21.8'±
INV 3" PVC CO 15.17'±

AS BUILT C.O. SMH
RIM EL 21.5'±
INV 3" PVC CO 15.27'±

1000 GAL. PRECAST
CONC. PUMP CHAMBER
RIM EL (N) = 21.3'±
RIM EL (S) = 21.5'±
TOP 2" PVC EL = 17.6'± (DEEP MARSH)

WETLAND ALTERATION (C)
OUTLET EL. 18.0'
FORE BAY
OPEN WATER
(SEDIMENT BASIN)

FORE BAY
OPEN WATER
(SEDIMENT BASIN)



REVISIONS	
DATE	DESCRIPTION
08/21/99	CAD REVERSE SEWER FORCE MAIN
10/12/99	CAD REVERSE SEWER FORCE MAIN
10/19/99	POT ADD SHALE TOPO ELEVATIONS
10/19/99	POT ADD SEWER MANHOLE & TRENCH DETAILS
10/19/99	POT RELOCATE REAR PARKING CATCH BASIN
04/16/00	POT RELOCATE ROOF DRAIN OUTLET AND INVERT
04/15/00	DTD GRADING REVERSE ENTRANCE PARKING AREA
	EXISTING TOPO REVERSE SOCCER FIELD, ETC.
08/28/01	POT ADD AS BUILT SAN SEWER SYSTEM LOCATION & INVERTS
08/28/01	POT ADD AS BUILT SAN SEWER FORCE MAIN LOCATION PER FIELD SELECTED LOCATIONS OF SETTLED SEWER TRENCH

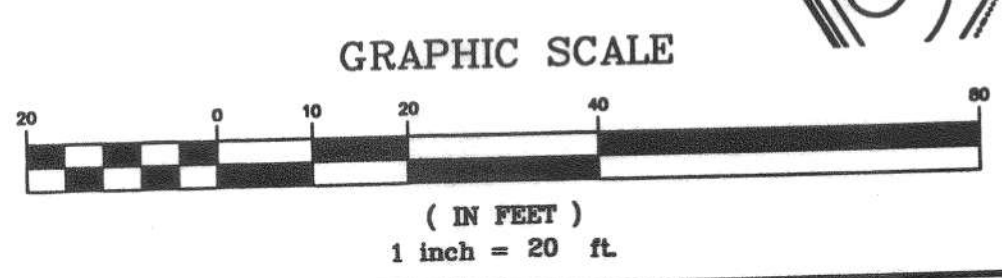
AS BUILT SEWER CONDITIONS

REVISED SITE DEVELOPMENT PLAN
AS PREPARED FOR
FIRST BAPTIST CHURCH/ASSEMBLY OF GOD
HALE STREET
NEWBURYPORT, MA.

PORT ENGINEERING ASSOCIATES, INC.
ONE HARRIS ST., NEWBURYPORT, MA. 01950
TELEPHONE : (978) 465-8594

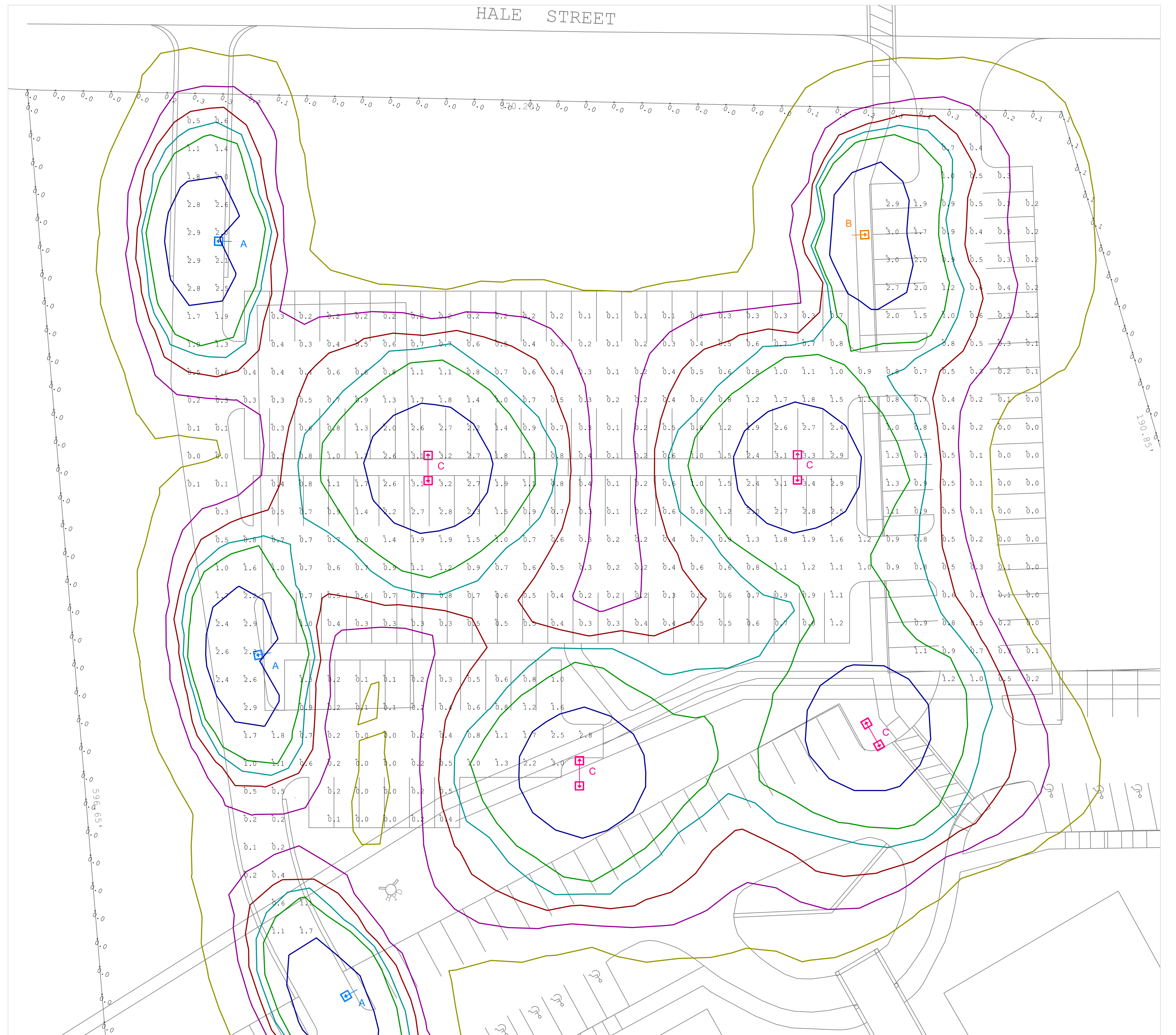


DESIGNED BY	DRAWN BY	CHECKED BY	SCALE	PROJECT NO.	SHEET NO.
P.D.T.	D.T.D.	P.D.T.	1"=40'	P2860	1 OF 2



Luminaire Schedule									
Symbol	Qty	Label	Description	Arrangement	Arm	MH	LLF	Lum. Lumens	Lum. Watts
	3	A	AR18-10M2-MV-NW-2-XX-530	SINGLE	1.5	20	0.850	7730	63
	1	B	AR18-10M2-MV-NW-4-XX-700	SINGLE	1.5	20	0.850	9937	87
	4	C	AR18-10M2-MV-NW-5-XX-530	BACK-BACK	1.5	20	0.850	7628	63

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking	Illuminance	Fc	0.9	3.4	0.0	N.A.	N.A.
Property Line	Illuminance	Fc	N.A.	0.4	0.0	N.A.	N.A.



ISOLINE KEY

- 0.00 fc
- 0.25 fc
- 0.50 fc
- 0.75 fc
- 1.00 fc
- 2.00 fc