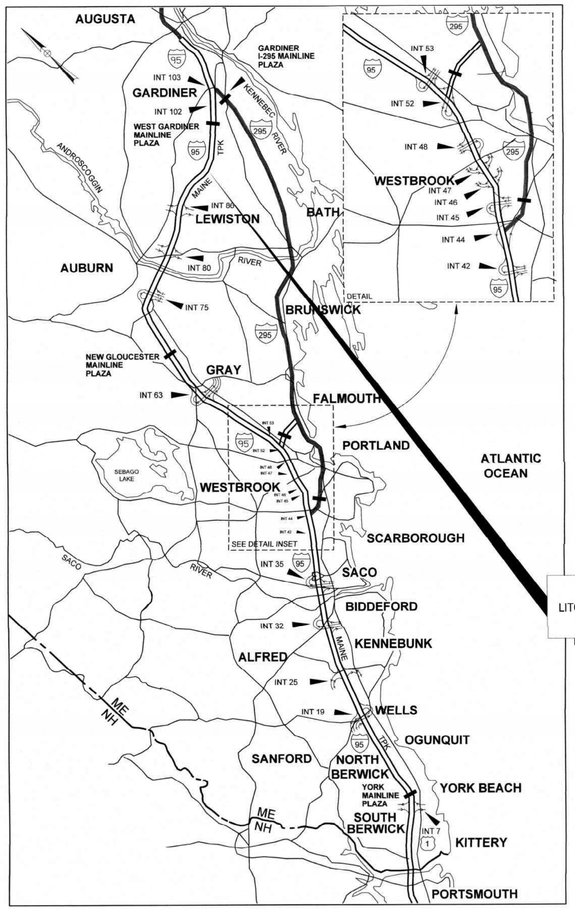

LOCATION MAP

CONTRACT 2022.08
LITCHFIELD 8-BAY GARAGE REPLACEMENT
MILE 92.7

MAINE TURNPIKE
THE GOLD STAR MEMORIAL HIGHWAY

MAINE TURNPIKE AUTHORITY

DANIEL E. WATHEN, CHAIR
ROBERT D. STONE, VICE CHAIR
MICHAEL J. CIANCHETTE, MEMBER
ANN R. ROBINSON, MEMBER
THOMAS J. ZUKE, MEMBER
JANE L. LINCOLN, MEMBER
BRUCE A. VAN NOTE, MEMBER EX-OFFICIO

S. PETER MILLS, EXECUTIVE DIRECTOR

CONTRACT 2022.08
LITCHFIELD 8-BAY GARAGE REPLACEMENT
MILE 92.7

INDEX OF SHEETS

LICENSED ARCHITECT
MICHAEL F. HAYS
No. 1724
STATE OF MAINE

SHEETS A-0 TO A-8

Michael F. Hays, R.A.
Grant-Hays Associates, Inc.
3/02/2022

STATE OF MAINE
CATHERINE A. FAUCHER
No. 7575
LICENSED PROFESSIONAL ENGINEER

SHEETS E-000 TO EP500

Catherine A. Faucher, P.E.
Allied Engineering
3/02/2022

APPROVED:

MAINE TURNPIKE AUTHORITY

PETER S. MERFELD, P.E. - CHIEF OPERATIONS OFFICER — DATE 2-24-22

STEPHEN R. TARTRE, P.E., - CHIEF ENGINEER/DIRECTOR OF ENGINEERING — DATE 2/24/22

JOHN W. CANNELL, P.E. - DIRECTOR OF MAINTENANCE — DATE 3/1/22

STATE OF MAINE
ANTHONY S. DAVIS
No. 8834
LICENSED PROFESSIONAL ENGINEER

SHEETS P000 TO MH100

Anthony S. Davis P.E.
Allied Engineering
3/02/2022

STATE OF MAINE
WILLIAM P. FAUCHER
No. 7133
LICENSED PROFESSIONAL ENGINEER

SHEETS S-000 TO SB-501

William P. Faucher, P.E.
Allied Engineering
3/02/2022

HNTB

STATE OF MAINE
TIMOTHY R. COTE
No. 10671
LICENSED PROFESSIONAL ENGINEER

TIMOTHY R. COTE P.E.
VICE PRESIDENT — DATE 3/1/2022

CONTRACT 2022.08

Date:2/23/2022

Filename: 00X_Title Sheet.dgn

Date:3/2/2022

GENERAL

1. ALL WORK SHALL CONFORM TO THE MAINE DEPARTMENT OF TRANSPORTATION (MAINEDOT) STANDARD DETAILS FOR HIGHWAYS AND BRIDGES (LATEST REVISION). THE MAINEDOT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL (LATEST REVISION) AND THE 2014 MAINEDOT STANDARD SPECIFICATIONS, EXCEPT AS MODIFIED BY THE MAINE TURNPIKE'S SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS UNLESS OTHERWISE INCLUDED IN THESE PLANS.

2. THE CONTRACTOR SHALL SUBMIT THE PROPOSED STAGING AREA(S) AND FIELD TRAILER LOCATION TO THE RESIDENT.

3. ANY DAMAGE TO PAVEMENT, SLOPES, OR STRUCTURES CAUSED BY THE CONTRACTOR'S EQUIPMENT, PERSONNEL OR OPERATIONS SHALL BE REPAIRED TO THE SATISFACTION OF THE RESIDENT. ALL WORK, EQUIPMENT, AND MATERIALS REQUIRED TO MAKE REPAIRS SHALL BE AT THE CONTRACTOR'S EXPENSE.

4. LIMITED AS-BUILT PLANS FOR THE EXISTING BUILDINGS ARE AVAILABLE FROM THE AUTHORITY UPON REQUEST.

5. ALL PAVEMENT SHALL BE SAWCUT PRIOR TO REMOVAL. ALL EXISTING PAVEMENT AREAS SHOWN TO BE REMOVED SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION FOR MTA MAINTENANCE VEHICLES AND PERSONNEL.

6. CONTRACTOR SHALL PROVIDE MTA WITH AS-CONSTRUCTED PLANS IN PDF AND CADD FORMATS. THE PLANS SHALL NOTE ALL CHANGES TO, BUT NOT LIMITED TO: PAVEMENT, UTILITIES, DRAINAGE, FOUNDATIONS, WIRING, ETC.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADVANCING THE WORK IN A MANNER THAT ALLOWS THE MAINTENANCE YARD AND ALL OF IT'S FACILITIES TO REMAIN OPERATIONAL DURING THE PROJECT. OPERATIONS THAT WILL IMPEDE MTA OPERATIONS SHALL BE COORDINATED A MINIMUM OF 14 DAYS IN ADVANCE OF THE WORK.

8. GEOTECHNICAL INFORMATION FURNISHED OR REFERRED TO IN THIS PLAN SET IS FOR THE BIDDER'S AND CONTRACTOR'S USE. NO ASSURANCE IS GIVEN THAT THE INFORMATION OR INTERPRETATIONS WILL BE REPRESENTATIVE OF ACTUAL SUBSURFACE CONDITIONS AT THE TIME OF CONSTRUCTION. THE AUTHORITY SHALL NOT BE RESPONSIBLE FOR THE BIDDER'S AND CONTRACTOR'S INTERPRETATIONS OF, OR CONCLUSIONS DRAWN FROM THE GEOTECHNICAL INFORMATION. THE BORING LOGS CONTAINED IN THE PLAN SET PRESENT FACTUAL AND INTERPRETIVE SUBSURFACE INFORMATION COLLECTED AT DISCRETE LOCATIONS. DATA PROVIDED MAY NOT BE REPRESENTATIVE OF THE SUBSURFACE CONDITIONS BETWEEN BORING LOCATIONS.

9. CLEARING LIMITS SHOWN ON THE PLANS ARE APPROXIMATE. FINAL CLEARING LIMITS WILL BE APPROVED BY THE RESIDENT. CLEARING WILL NOT BE PERMITTED IN THE MONTHS OF JUNE OR JULY.

10. RIGHT OF WAY AND PROPERTY LINES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

11. DUST CONTROL IS REQUIRED AND IS INCIDENTAL TO THE CONTRACT.

12. A MAXIMUM OF 3 FOOT CLEAR SPACE SHALL BE PERMITTED BETWEEN BOLLARDS IN FRONT OF THE PROPANE TANKS. BOLLARDS SHALL BE PLACED ON ALL SIDES THAT COULD BE IMPACTED BY VEHICLES.

EARTHWORK

1. WASTE MATERIALS SHALL BE DISPOSED OF OFF THE PROJECT SITE, IN ACCORDANCE WITH CHAPTER 404, DEPARTMENT OF ENVIRONMENTAL PROTECTION SOLID WASTE MANAGEMENT RULES.

2. EXCAVATIONS ACCOMPLISHED AS PART OF THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH OSHA SUBPART P OF 29 CFR PART 1926.650-652 (CONSTRUCTION STANDARDS FOR EXCAVATION).

3. THE GRUBBING DEPTH HAS BEEN ESTIMATED AS 6 INCHES IN FIELD AREAS AND 12 INCHES IN WOODED AREAS.

4. REMOVAL OF EXISTING PAVEMENT, WITHIN THE AREAS OF FULL DEPTH PAVEMENT AND FULL DEPTH RECONSTRUCTION, SHALL BE PAID FOR AS COMMON EXCAVATION. EXISTING PAVEMENT THICKNESS HAS BEEN ESTIMATED TO BE 5 INCHES.

5. GRANULAR BORROW SHALL BE USED IN THE AREAS SPECIFIED ON THE PLANS, AND TO BACKFILL AREAS OF MUCK EXCAVATION AND IN LOW WET AREAS TO 1' ABOVE THE WATER LEVEL OR OLD GROUND. GRANULAR BORROW USED TO FILL MUCK OR WET AREAS SHALL MEET THE REQUIREMENTS OF GRANULAR BORROW-UNDERWATER BACKFILL. MATERIALS EXCAVATED FROM ON SITE MEETING THE REQUIREMENTS OF GRANULAR BORROW OR GRANULAR BORROW-UNDERWATER BACKFILL SHALL BE REUSED ON SITE. EACH REQUIRED HANDLING OF THE MATERIAL SHALL BE MEASURED FOR PAYMENT AS COMMON EXCAVATION.

6. TOPSOIL STRIPPED IN AREAS OF CONSTRUCTION THAT IS SUITABLE FOR THE REUSE AS LOAM SHALL BE STOCKPILED ON SITE AT A LOCATION TO BE DESIGNATED BY THE OWNER. UNSUITABLE SOIL SHALL BE SEPARATED, REMOVED AND DISPOSED OF AT AN APPROVED DISPOSAL LOCATION OFF SITE.

7. THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING.

8. ALL SITE DISTURBANCE WILL REMAIN WITHIN THE GRADING LIMITS SHOWN ON PLANS. NO IMPACT TO WETLANDS ARE AUTHORIZED.

9. GEOTECHNICAL EXPLORATIONS INDICATE THE SOILS ON SITE GENERALLY CONSIST OF FILL MATERIAL PLACED OVER GLACIAL TILL. ORGANIC MATERIALS WERE ENCOUNTERED BETWEEN THE FILL MATERIAL AND GLACIAL TILL LAYERS ALONG THE WESTERLY AND NORTHERLY PORTIONS OF THE BUILDING FOOTPRINT. THE CONTRACTOR'S EXCAVATION OPERATIONS SHALL REMOVE THESE ORGANIC MATERIALS. THE QUANTITY OF COMMON EXCAVATION AND FILL MATERIALS WERE DEVELOPED ASSUMING EXCAVATION WITHIN THE BUILDING FOOTPRINT EXTENDS TO ELEVATION 347.0 FOR THE EASTERN HALF OF THE BUILDING, AND ELEVATION 345.0 FOR THE WESTERN HALF OF THE BUILDING. THE FINAL EXCAVATION LIMITS MAY VARY BASED THE ACTUAL ELEVATION OF THE GLACIAL TILL LAYER AND THE PRESENCE OF ORGANICS. EXCAVATION LIMITS SHALL BE APPROVED BY THE RESIDENT PRIOR TO THE PLACEMENT OF BACKFILL.

10. FOLLOWING APPROVAL OF THE EXCAVATION LIMITS, AND PRIOR TO THE PLACEMENT OF BACKFILL, THE EXISTING SUBGRADE SHALL BE PROOF COMPACTED AS FOLLOWS:

    A) AREAS OF EXCAVATION EXTENDING TO ELEVATION 345 OR BELOW: PROOF COMPACT SUBGRADE WITH 3 TO 5 PASSES OF A VIBRATORY COMPACTOR HAVING A STATIC WEIGHT OF AT LEAST 500 POUNDS.

    B) AREAS OF EXCAVATION THAT DO NOT EXTEND TO ELEVATION 345: PROOF COMPACT SUBGRADE TO AT LEAST 95 PERCENT OF ITS MAXIMUM DRY DENSITY

11. PROOF COMPACTION SHALL BE CONSIDERED INCIDENTAL TO EARTHWORKS PAY ITEMS.

12. THE MAINE TURNPIKE OWNS A STOCKPILE OF APPROXIMATELY 300 CUBIC YARDS OF COMMON FILL MATERIAL AT THE LITCHFIELD MAINTENANCE YARD. THE CONTRACTOR WILL BE PERMITTED TO USE THIS FILL MATERIAL FOR CONSTRUCTION OF THE PROPOSED BERM AT THE NORTHWEST CORNER OF THE PROJECT SITE. PAYMENT WILL BE MADE AS COMMON BORROW.

EROSION CONTROL

1. THE ANTICIPATED EROSION CONTROL DEVICE LOCATIONS ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL PROPOSE ACTUAL TYPE AND LOCATION OF DEVICES FOR APPROVAL BY THE RESIDENT. ADDITIONAL MEASURES MAY BE PROPOSED BY THE CONTRACTOR DUE TO SITE OR WEATHER CONDITIONS. THE RESIDENT MAY DIRECT THE CONTRACTOR TO IMPLEMENT ADDITIONAL MEASURES. ANY ADDITIONAL MEASURES APPROVED BY THE RESIDENT WILL BE MEASURED FOR PAYMENT UNDER THE APPROPRIATE BID ITEMS.

2. 4 INCH LOAM HAS BEEN ESTIMATED FOR 100% OF THE DISTURBED SLOPE AREA. ACTUAL PLACEMENT OF THE LOAM SHALL BE AS DESIGNATED BY THE RESIDENT.

3. UNLESS OTHERWISE NOTED, SEEDING METHOD NO. 1 SHALL BE UTILIZED ON ALL LAWNS AND DEVELOPED AREAS. SEEDING METHOD NO. 2 SHALL BE UTILIZED ON ALL OTHER AREAS.

4. MULCH SHALL BE APPLIED IN AREAS SEEDED EXCEPT WHERE EROSION CONTROL BLANKET IS SPECIFIED.

5. ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MAINE ENVIRONMENTAL PROTECTION BEST MANAGEMENT PRACTICES.

6. TEMPORARY SEED SHALL BE APPLIED TO ALL DISTURBED AREAS THAT WILL NOT BE SEEDED WITH FINAL SEED WITHIN 30 DAYS.

7. TEMPORARY EROSION CONTROL BLANKET, ITEM 613.319 SHALL BE INSTALLED IN ALL DITCHES AND SLOPES 2:1 AND STEEPER FROM THE TOP TO TOE OF SLOPE. LOAM AND SEED SHALL BE PLACED PRIOR TO THE INSTALLATION OF THE EROSION CONTROL BLANKET. LIMITS OF THE EROSION CONTROL BLANKET IN DITCHES SHALL BE 6' WIDE UNLESS OTHERWISE SPECIFIED ON THE PLANS OR AS DESIGNATED BY THE RESIDENT.

8. TEMPORARY STABILIZATION WITH MULCH OR OTHER NON-ERODIBLE COVER IS REQUIRED ON ALL EXPOSED SOILS THAT WILL NOT BE WORKED ON FOR MORE THAN 7 DAYS. AREAS WITHIN 75 FEET OF A WETLAND OR WATERBODY SHALL BE STABILIZED WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.

9. LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE SITE.

10. PRIOR TO BEGINNING ANY LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL INSTALL THE PERIMETER SILT FENCES AND SEDIMENTATION BARRIERS.

11. WATER FROM DEWATERING SHALL BE PUMPED THROUGH A DIRT BAG (SEE DETAIL). DIRT BAG OUTLET LOCATION SHALL NOT BE WITHIN 50' OF AN EXISTING WETLAND. NO SEPARATE PAYMENT WILL BE MADE TO CONTRACTOR FOR PROVIDING THE DIRT BAG. IT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

DRAINAGE

1. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT.

2. INLETS AND OUTLETS OF ALL CULVERTS AND DRAIN OUTLETS SHALL BE RIPRAPPED UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE RESIDENT.

3. IF FOUNDATION MATERIAL IS REQUIRED UNDER CULVERTS, IT SHALL MEET THE REQUIREMENTS FOR GRANULAR BORROW - UNDERWATER BACKFILL.

4. ONE GREEN DELINEATOR POST SHALL BE INSTALLED AT ALL UNDERDRAIN AND STORM DRAIN OUTLETS.

UTILITIES

1. EXISTING UTILITIES ON THESE PLANS WERE COMPILED FROM FIELD SURVEY AND VARIOUS OTHER SOURCES. LOCATIONS ARE NOT GUARANTEED TO BE ACCURATE NOR IS IT GUARANTEED THAT ALL UTILITIES ARE SHOWN. NO SEPARATE OR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR DUE TO ANY VARIANCE BETWEEN THE DATA SHOWN ON THE PLANS AND THE ACTUAL FIELD CONDITIONS ENCOUNTERED. NO WORK SHALL BE STARTED UNTIL THE OWNERS OF THE VARIOUS UTILITIES ARE NOTIFIED BY THE CONTRACTOR OF THE PROPOSED CONSTRUCTION. THE CONTRACTOR IS ALSO REQUIRED TO CONTACT DIG SAFE AT 1-888-344-7233, 811, OR WWW.DIGSAFE.COM IN CONFORMANCE WITH ALL STATE AND LOCAL LAWS, ORDINANCES, AND STATUTES.

2. THE MAINE TURNPIKE AUTHORITY IS A NON-MEMBER UTILITY OPERATOR AND IS NOT REGISTERED WITH THE DIG SAFE SYSTEM. THE CONTRACTOR SHALL CONTACT ALL NON-MEMBERS THROUGH WWW.OKTODIG.COM OR AS OTHERWISE REQUIRED BY THE MAINE PUBLIC UTILITIES COMMISSION. ALL PROPOSED EXCAVATION LOCATIONS SHALL BE MARKED AT THE TIME OF NOTIFICATION. NO EXCAVATION SHALL BE PERMITTED UNTIL THE AUTHORITY HAS LOCATED AND MARKED ITS' UNDERGROUND UTILITIES. THE RESIDENT ENGINEER SHALL BE PROVIDED AN ELECTRONIC COPY OF ALL DIG SAFE TICKETS WITHIN 24 HOURS OF THEIR RELEASE FOR PROJECT NOTIFICATIONS AND 3RD PARTY UTILITY LOCATOR COORDINATION.

3. ALL UTILITY FACILITIES SHALL BE ADJUSTED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. EACH UTILITY WILL NEED TO BE NOTIFIED A MINIMUM OF 10 DAYS PRIOR TO ANY WORK BEING DONE TO THEIR FACILITY.

4. THE UTILITIES INVOLVED IN THIS CONTRACT ARE:
   THE MAINE TURNPIKE AUTHORITY
   CENTRAL MAINE POWER COMPANY

5. CONTRACTOR SHALL PROTECT ALL NEW AND EXISTING UTILITIES FROM DAMAGE DURING THE CONSTRUCTION AS APPROVED BY THE UTILITY OWNERS. SEE SPECIFICATIONS FOR REQUIRED UTILITY COORDINATION.

6. EXCEPT AS ALLOWED IN THE PROJECT SPECIFICATIONS OR APPROVED BY THE RESIDENT, THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES IN SERVICE AT ALL TIMES.

7. IF THE CONTRACTOR DAMAGES UTILITY SERVICES, HE SHALL IMMEDIATELY NOTIFY THE RESPECTIVE UTILITY COMPANY AND SHALL IMMEDIATELY REPLACE THEM AT HIS OWN EXPENSE.

8. DURING CONSTRUCTION, THE PROPANE TANKS SHALL BE PROTECTED AT ALL TIMES.

9. THE CONTRACTOR SHALL SUBMIT DESIGN CALCULATIONS AND CONSTRUCTION DRAWINGS FOR THE CONCRETE PROPANE TANK PAD, IN ACCORDANCE WITH SPECIAL PROVISION 502.

10. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EMERGENCY BACKUP POWER AND WATER SERVICES ON SITE DURING CONSTRUCTION. SHORT SERVICE OUTAGES ARE PERMITTED. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

Filename: 00X_GeneralNotes.dgn

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by: HNTB

CONSULTANT PROJECT MANAGER: Timothy R. Cote, P.E.

	By	Date		By	Date
Designed	PEM	03\22	Checked	DAM	03\22
Drawn	PEM	03\22	In Charge of	TRC	03\22

HNTB CORPORATION
82 Running Hill Road, Suite 201
South Portland, ME 04106
TEL (207) 774-5155
FAX (207) 228-0909

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

GENERAL NOTES

SHEET NUMBER: C-001

CONTRACT:2022.08

Date:3/2/2022

EXISTING 8000 GAL ABOVEGROUND SPLIT FUEL TANK (TO BE RELOCATED TO CENTER OF MAINTENANCE YARD. AS SHOWN ON THIS PLAN. BY MTA/OTHERS IN SUMMER OF 2022)

REMOVE EXISTING CONCRETE FUEL TANK PAD

I-95 SB

EXISTING PROPANE TANKS TO REMAIN

I-95 NB

EXISTING SEPTIC TO REMAIN (LOCATION APPROXIMATED)

RELOCATE EXISTING PROPANE TANKS

REMOVE AND DISPOSE OF WOVEN WIRE FENCE. PAYMENT FOR FENCE REMOVAL SHALL BE INCIDENTAL TO THE CONTRACT

REMOVE EXISTING UNDERGROUND PROPANE LINE

EXISTING SANDER RACKS TO BE REMOVED BY MTA

5 BAY GARAGE/OFFICE

FABRICATION SHOP

Parcel No. 9-B

PL

EXISTING COMMUNICATION DROPS AND LINES TO REMAIN. EXACT LOCATION UNKNOWN.

EXISTING WELL #2 AND PUMP TO REMAIN

APPROXIMATE LOCATION OF FIELD TRAILER FOR MTA CONTRACT 2022.06

REMOVE EXISTING OVERHEAD ELECTRIC

EXISTING UTILITY POLE TO REMAIN

HALLOWELL-LITCHFIELD RD

REMOVE EXISTING ELECTRICAL CONDUITS

RETAIN EXISTING EMPTY UNDERGROUND CONDUITS. SEE ELECTRICAL SITE PLAN FOR MORE INFORMATION

EXISTING UNDERGROUND FIBER TO REMAIN

EXISTING WATER SUPPLY FROM WELL #1 TO REMAIN

RELOCATE UNDERGROUND ELECTRIC TO WELL#1

THE CONTRACTOR MAY UTILIZE THE SPACE WITHIN THE CLOUDED AREA FOR TEMPORARY STORAGE OF CONSTRUCTION MATERIALS.

CLEARING REQUIRED FOR DRAINAGE OUTLET (ALL CLEARING IS INCIDENTAL TO CONTRACT)

SAND SHED

REMOVE EXISTING UTILITY POLE AND 4 BOLLARDS

EXISTING STORAGE CONTAINER TO BE MOVED BY MTA

EXISTING 8000 GAL ABOVEGROUND SPLIT FUEL TANK (RELOCATED TO THIS LOCATION BY MTA/OTHERS IN SUMMER OF 2022)

REMOVE GENERATOR AND GENERATOR BUILDING.

REMOVE CONCRETE FLOOR SLAB AND FOUNDATION

FILL AND ABANDON TWO 3000 GALLON FLOOR DRAIN HOLDING TANKS. FOLLOWING RELOCATION OF WATER SYSTEM.

Parcel No. 8-B

SALT SHED

REMOVE EXISTING 6 INCH PVC BACKWASH DRAIN. FOLLOWING RELOCATION OF THE WATER SYSTEM.

EXISTING MECHANICS GARAGE

EXISTING CONDUIT FOR PUMP CONTROLS TO REMAIN

REMOVE EXISTING UNDERGROUND PROPANE SERVICE TO EXISTING GENERATOR BUILDING

RELOCATE TEMPORARY INSULATED WATER UTILITY SHED TO AN ON-SITE LOCATION IDENTIFIED BY THE RESIDENT. ONCE WATER SYSTEM HAS BEEN RELOCATED. PAYMENT SHALL BE INCIDENTAL TO THE CONTRACT.

Parcel No. 2

PL

SURVEY NOTES

1. NORTH IS REFERENCED TO GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE, NAD83.
2. ELEVATIONS ARE BASED ON GPS OBSERVATIONS. ALL ELEVATIONS REFER TO THE NAVD88 DATUM. BENCHMARK (A) IS A SPIKE IN LIGHT POLE 90/142. ELEVATION: 345.90'. BENCHMARK (B) IS A SPIKE IN LIGHT POLE CMP 90.01. ELEVATION: 349.77'.
3. UTILITY INFORMATION ON THIS PLAN IS APPROXIMATE, AND BASED ON LOCATION OF VISIBLE FEATURES.
4. PROJECT AREA WAS COVERED BY SNOW AND ICE AT THE TIME OF THE SURVEY AND SOME FEATURES MAY HAVE BEEN OBSCURED AND NOT SHOWN ON THIS PLAN.
5. BOLLARD REMOVAL SHALL BE CONSIDERED INCIDENTAL TO COMMON EXCAVATION.

Scale: 50 0 50 100
Scale of Feet

No.	Revision	By	Date

Designed by: HNTB

CONSULTANT PROJECT MANAGER: Timothy R. Cote, P.E.

	By	Date		By	Date
Designed	PEM	03\22	Checked	DAM	03\22
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82 Running Hill Road, Suite 201
South Portland, ME 04106
TEL (207) 774-5155
FAX (207) 228-0909

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

EXISTING CONDITIONS AND REMOVALS PLAN

SHEET NUMBER: C-101

CONTRACT:2022.08

Filename: 0XX_Existing Conditions.dgn

Date:3/2/2022

PROPOSED PROPANE GAS LINES

6" PVC PIPE, L=4', S=4.0%

6" PVC PIPE, L=4', S=4.0%

STONE DRIP EDGE (TYP.)

26.00'

INTERNAL BUILDING DRAIN EXIT POINT INV. 343.25'

WATER SERVICE ENTRY

PROPOSED ELECTRIC METER

8 BAY GARAGE 55'X160'

GENERATOR PAD

12.50'

1.5" WATERLINE (FROM 8-BAY TO 5-BAY & FABRICATION SHOP)

INTERCEPT EXIST. 1.5" WATERLINE TO EXISTING OFFICE/GARAGE

SEE INSET

RELOCATE PROPANE TANKS TO PRECAST TANKS PADS. SEE DETAIL ON SHEET 7 FOR ADDITIONAL INFORMATION.

6,000 GAL. FLOOR DRAIN HOLDING TANK RIM=SEE GRADING PLAN

INV. OUT = 343.00±

RIPRAP OUTLET APRON (SEE DETAIL ON SHEET 6)

4" PVC TREATMENT SKID BACKWASH DRAIN OUTLET L=214', S=0.5% (MIN.)

4" PVC FOUNDATION DRAIN OUTLET L=176', S=0.5% (MIN.)

OIL WATER SEPARATOR RIM= SEE GRADING PLAN INV. IN=343.09' INV. OUT=342.84'

CONNECTION POINT FOR CONTINUATION OF EXISTING 1" CONDUIT

REMOVE EXISTING CONCRETE SLAB AND BOLLARDS AND CONSTRUCT NEW SLAB. WORK SHALL BE PAID UNDER ITEM 502.205 - REPLACEMENT OF OIL/WATER SEPARATOR TANK SLAB.

1.5" WATERLINE (FOR FUTURE BUNKHOUSE)

92.60'

184.37'

Parcel No

PL

STUB OUT SPARE WATER AND ELECTRICAL CONDUITS

UTILITY POLE/RISER POLE WITH POLE MOUNTED TRANSFORMER

FINAL PAVING LIMITS AROUND ABOVE GROUND FUEL TANK TO BE COORDINATED IN THE FIELD BY THE RESIDENT.

2.5" WATER LINE. CONNECT TO EXISTING 2" WATER LINE (TO MAINT. GARAGE FAST FILL. HOSE VEHICLE WASH)

1.5" WATER LINE. CONNECT TO EXISTING 1.5" WATER LINE (TO MAINT. GARAGE WATER FIXTURES)

2.5" WATER LINE. CONNECT TO EXISTING 2" WATERLINE FROM EXISTING PUMP

EXISTING 4" SCH 80 PVC VENT PIPING FOR UNDERGROUND WATER TANK (5' COVER). CAP/ABANDON AND REROUTE TO MAINTENANCE BUILDING (1/8" PER FOOT MIN. SLOPE)

174.54'

SAW CUT (TYP.)

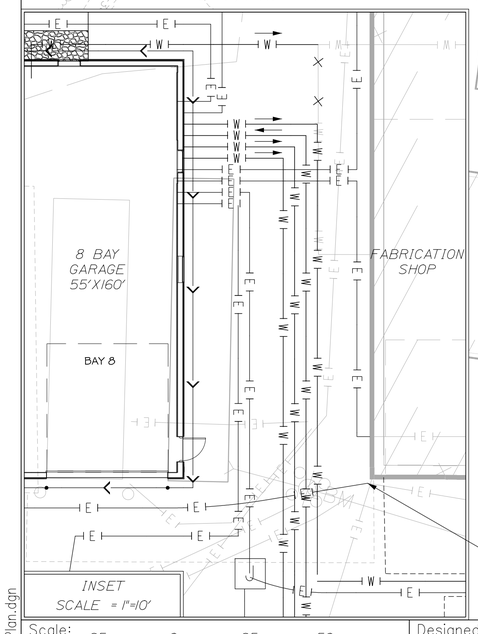
2" WATER SUPPLY LINE FROM WELL #2 TO EXISTING 6,000 GALLON HOLDING TANK TO REMAIN

EXISTING 2" WATERLINE FROM WELL #1, LOCATION SHOWN IS APPROXIMATE

EXISTING 6,000 GALLON WATER HOLDING TANK AND PUMP TO REMAIN

BOLLARD (TYP.)

ABOVE GROUND GOOSENECK VENT



CONNECTION POINT FOR CONTINUATION OF EXISTING 1" CONDUIT

NOTES:

1. LOCATION OF CONDUITS AND WATERLINE SHOWN ARE APPROXIMATE AND SCHEMATIC.
2. SEE ELECTRICAL PLANS FOR CONDUIT AND WIRE SIZE INFORMATION.

PAVING LIMITS

BUILDING CORNERS - LAYOUT DATA		
LOCATION	NORTHING	EASTING
NORTHWEST CORNER	471014.041	3004535.933
NORTHEAST CORNER	471064.265	3004687.846
SOUTHEAST CORNER	471012.045	3004705.111
SOUTHWEST CORNER	470961.821	3004553.198

Scale: 25 0 25 50
Scale of Feet

No.	Revision	By	Date

Designed by: HNTB

CONSULTANT PROJECT MANAGER: Timothy R. Cote, P.E.

	By	Date		By	Date
Designed	PEM	03\22	Checked	DAM	03\22
Drawn	PEM	03\22	In Charge of	TRC	03\22

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

SITE & UTILITY PLAN

SHEET NUMBER: C-102

CONTRACT:2022.08

Filename: 0XX_Site&UtilityPlan.dgn

Date:3/2/2022

3:1 SLOPE

6:1 SLOPE

PROPOSED EARTHEN BERM (SEE NOTE 1)

PROPOSED BUILDING FINISHED FLOOR ELEVATION=349.50

5'X5' LEVEL LANDING (2% MAX)

FFE = 349.25

FFE = 349.00

348.98

348.75

348.58

348.00

348.03

348.12

348.40

348.22

347.20

346.65

346.46

346.13

RIM ELEV. = 348.77

RIM ELEV. = 349.09

RIM ELEV. = 349.30

RIM ELEV. = 349.37

RIM ELEV. = 346.64

RIM ELEV. = 346.58

348.32

348.17

348.14

347.81

348.10

348.65

347.88'

347.31

MATCH EXISTING PAVEMENT ELEVATION ALONG SAWCUT (TYP.)

184.37'

92.60'

174.54'

NOTES:

1. MTA HAS FILL AVAILABLE FOR THE CONSTRUCTION OF THE EARTHERN BERM. SEE EARTHWORK NOTE 12 FOR ADDITIONAL INFORMATION.
2. PAVEMENT ELEVATIONS AT INTERFACES WITH EXISTING PAVEMENT ARE APPROXIMATE. THE FINISHED PAVEMENT ELEVATION SHALL BE ADJUSTED AS REQUIRED TO MATCH EXISTING PAVEMENT.

Filename: 0XX_Grading Plan.dgn

Scale: 25 0 25 50
Scale of Feet

No.	Revision	By	Date

Designed by: HNTB

CONSULTANT PROJECT MANAGER: Timothy R. Cote, P.E.

	By	Date		By	Date
Designed	PEM	03\22	Checked	CDH	03\22
Drawn	PEM	03\22	In Charge of	TRC	03\22

HNTB CORPORATION
82 Running Hill Road, Suite 201
South Portland, ME 04106
TEL (207) 774-5155
FAX (207) 228-0909

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

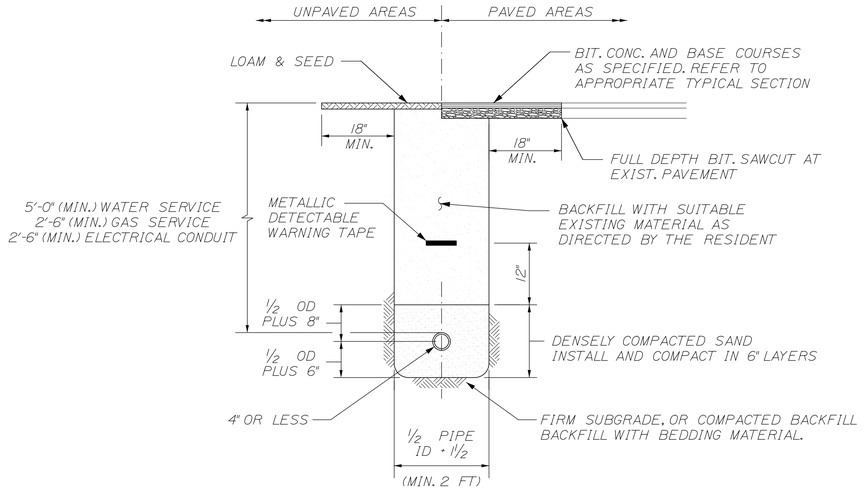
MTA PROJECT MANAGER: Brian Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

GRADING, DRAINAGE, & EROSION CONTROL PLAN

SHEET NUMBER: C-103

CONTRACT:2022.08



STANDARD PIPE/WATER LINE TRENCH DETAIL

N.T.S.

NOTES:

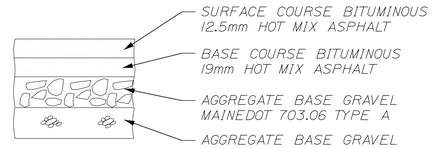
1. BEDDING SHALL BE COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY. USE HAND TAMPERS OR VIBRATORY COMPACTORS.

2. CONTRACTOR SHALL SHORE TRENCH SIDES WHEN REQUIRED OR AS DIRECTED BY THE RESIDENT.

3. CONTRACTOR TO INSTALL TRACER WIRE OVER PIPE.

4. ADJACENT CONDUITS/PIPES SHOULD BE SEPARATED HORIZONTALLY BY A MINIMUM OF 6".

5. SEE UNDERDRAIN TRENCH DETAIL FOR UNDERDRAIN AND DRAIN OUTLET TRENCH SECTION



NOTES:

1. COMPACT SUBGRADE TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557.

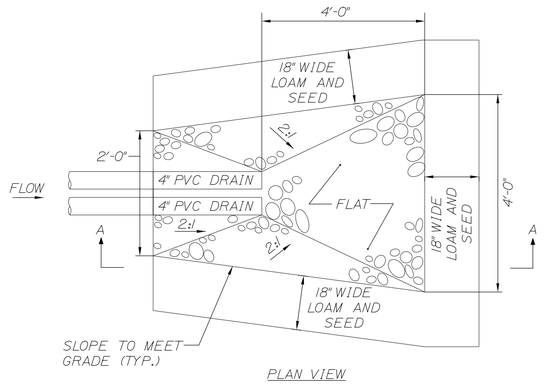
2. IN AREAS OF PROPOSED PAVEMENT, OUTSIDE THE LIMITS OF EXISTING PAVEMENT, THE CONTRACTOR SHALL PROVIDE FULL DEPTH GRAVEL CONSTRUCTION.

3. WITHIN LIMITS OF EXISTING PAVEMENT, AND AS DIRECTED BY THE RESIDENT, THE CONTRACTOR SHALL NOT REMOVE AND REPLACE EXISTING SUBBASE GRAVEL THAT MEETS REQUIREMENTS OF TYPE D GRAVEL. FOLLOWING ACCEPTANCE OF THE SUBBASE MATERIAL THE CONTRACTOR SHALL SHIM THE SUBBASE LAYER AS REQUIRED TO ALLOW FOR THE SPECIFIED PAYMENT THICKNESS USING AGGREGATE BASE COURSE, TYPE A. THE CONTRACTOR WILL BE PAID BASED ON THE ACTUAL QUANTITY OF MATERIAL REMOVED AND REPLACED.

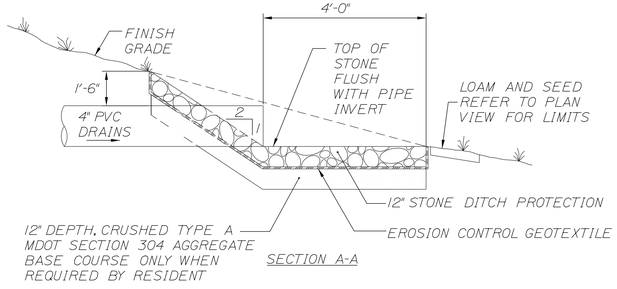
THICKNESS OF LAYERS AND ORDER	
1.5"	SURFACE COURSE BITUMINOUS 12.5mm HOT MIX ASPHALT
2.5"	BASE COURSE BITUMINOUS 19mm HOT MIX ASPHALT
6"	AGGREGATE BASE GRAVEL MAINEDOT 703.06 TYPE A
15"	AGGREGATE SUBBASE GRAVEL MAINEDOT 703.06 TYPE D

BITUMINOUS PAVEMENT SECTION

NOT TO SCALE



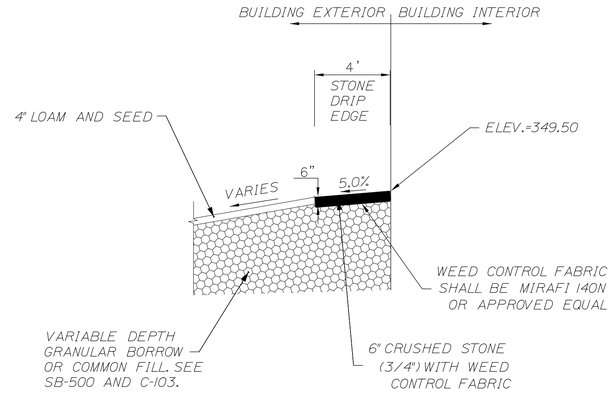
PLAN VIEW



SECTION A-A

DRAIN AND CULVERT OUTLET APRON

NOT TO SCALE



STONE DRIP EDGE DETAIL

NOT TO SCALE

Date:3/2/2022

Filename: 0XX_Details1.dgn

Scale: 50 0 50 100
Scale of Feet

No.	Revision	By	Date

Designed by: HNTB

CONSULTANT PROJECT MANAGER: Timothy R. Cote, P.E.

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

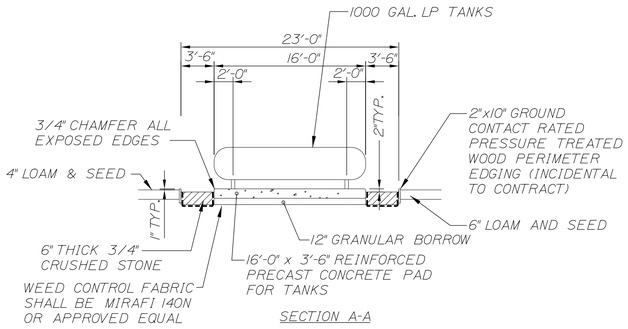
MTA PROJECT MANAGER: Brian Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

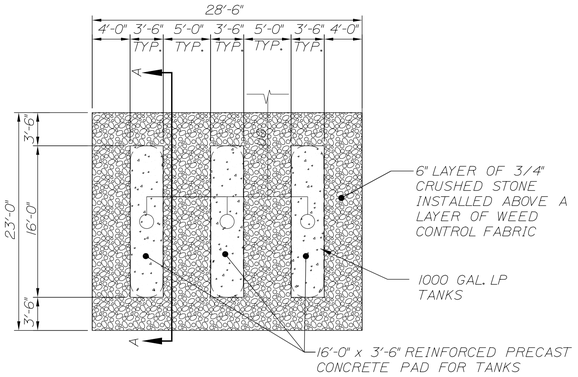
DETAILS SHEET 1

SHEET NUMBER: C-401

CONTRACT:2022.08



SECTION A-A

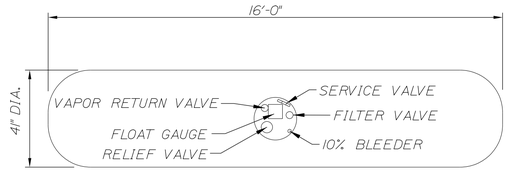


PLAN VIEW

NOTE:
1. PROPANE TANK DIMENSIONS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR.

ABOVE GROUND PROPANE GAS TANK FARM

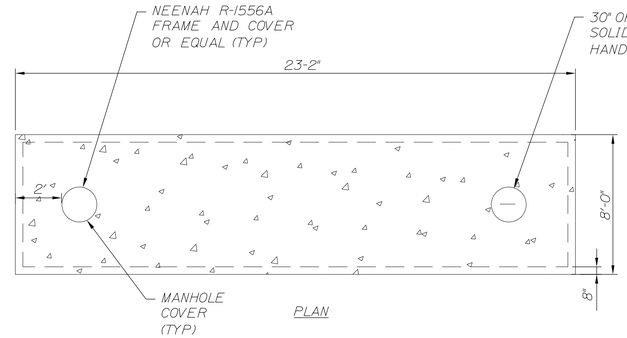
NOT TO SCALE



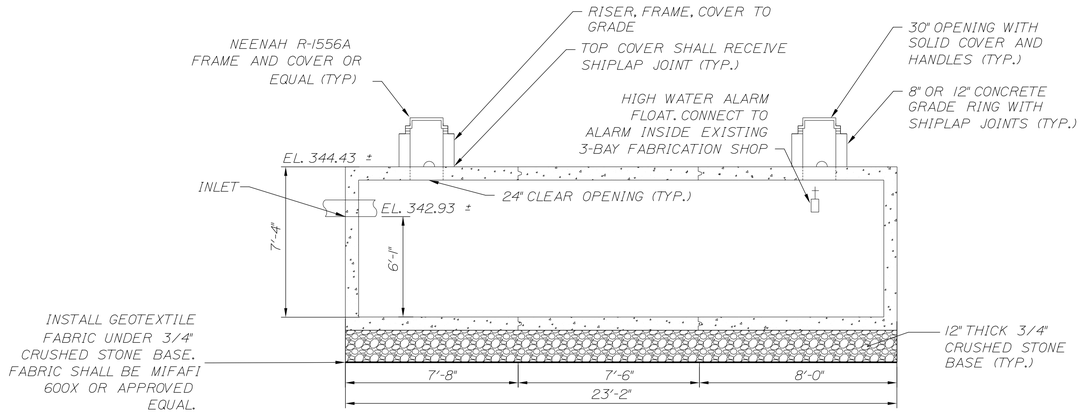
NOTE:
1. USE EXISTING TANKS OR AMERICAN WELDING & TANK ASME TANK OR APPROVED EQUAL. TANK INSTALLATION TO BE COORDINATED WITH THE LOCAL GAS UTILITY COMPANY, AND SHALL COMPLY WITH ITS STANDARDS.

1,000 GALLON PROPANE GAS STORAGE TANK

NOT TO SCALE



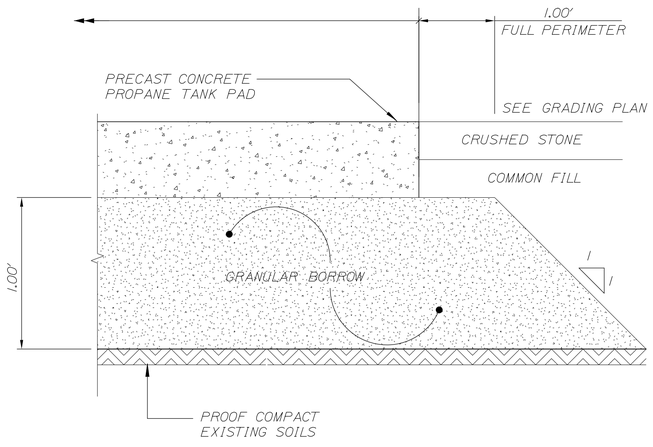
PLAN



SECTION

6,000 GALLON HOLDING TANK

NOT TO SCALE



NOTE:
1. THE CONTRACTOR SHALL SUBMIT DESIGN CALCULATIONS FOR THE CONCRETE PROPANE TANK PAD IN ACCORDANCE WITH SPECIAL PROVISION 502.

PRECAST CONCRETE PROPANE TANK PAD

NOT TO SCALE

Date:3/2/2022

Filename: 0XX_Details2.dgn

Scale: 50 0 50 100
Scale of Feet

No.	Revision	By	Date

Designed by: HNTB

CONSULTANT PROJECT MANAGER: Timothy R. Cote, P.E.

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian Taddeo, P.E.

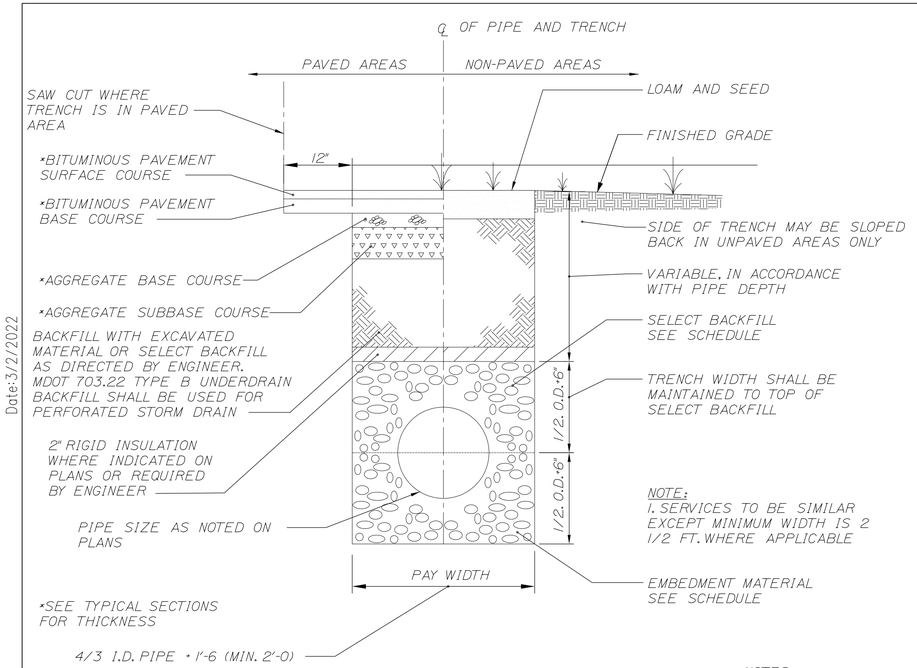
LITCHFIELD 8-BAY GARAGE REPLACEMENT

DETAILS SHEET 2

SHEET NUMBER: C-402

CONTRACT:2022.08

Date:3/2/2022



SCHEDULE OF TRENCH BACKFILL		
TYPE OF PIPE	EMBEDMENT MATERIAL	SELECT BACKFILL
4" PVC PIPE (FOUNDATION DRAIN/ EFFLUENT DRAIN)	MDOT 703.22 TYPE C 3/4" CRUSHED STONE	MDOT 703.22 TYPE B UD BACKFILL
PERFORATED PVC-SDR35 HDPE	MDOT 703.22 TYPE C 3/4" CRUSHED STONE	MDOT 703.22 TYPE C 3/4" CRUSHED STONE

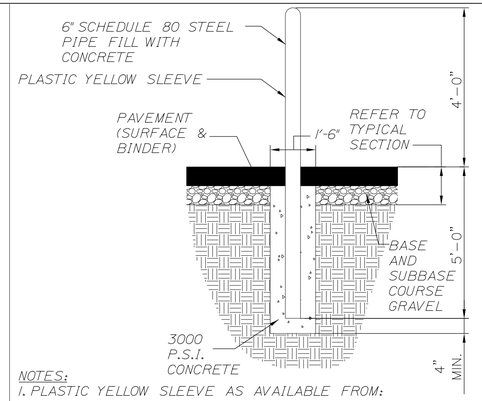
MINIMUM COVER	PIPE
2'-6"	DRAIN (1)

(1) COVER BETWEEN 2'-6" AND 3' SHALL INCLUDE 4" RIGID INSULATION. COVER BETWEEN 3' AND 4' SHALL INCLUDE 2" RIGID INSULATION.

NOTES:
1. BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

2. INSTALL WARNING TAPE DIRECTLY ABOVE UTILITIES, 12" BELOW FINISH GRADE.

UNDERDRAIN TRENCH DETAIL
NOT TO SCALE



NOTES:
1. PLASTIC YELLOW SLEEVE AS AVAILABLE FROM:

IDEAL SHIELD, LLC
DETROIT, MICHIGAN
(313) 842-7290

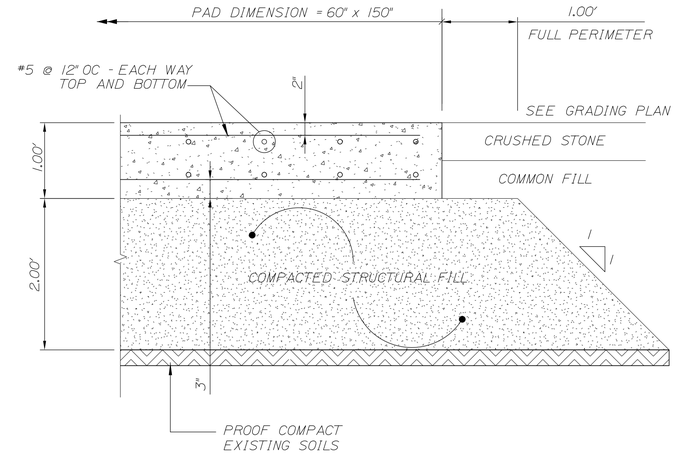
LIBERTY EQUIPMENT SALES
HOUSTON, TEXAS
(218) 987-8708
(888) 987-8708

OR ENGINEER APPROVED EQUIVALENT.

2. PAYMENT FOR SITE BOLLARD INSTALLATION SHALL BE MADE UNDER ITEM 832.41 TYPE A STEEL SITE BOLLARD.

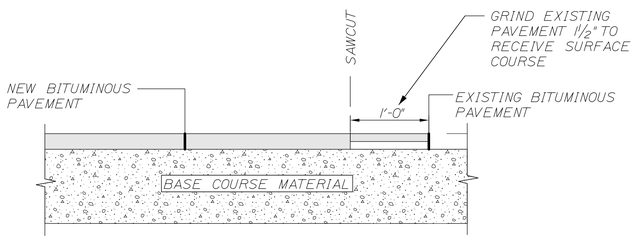
3. REFER TO DETAIL A4 ON SHEET SB-501 FOR DETAILS ON BUILDING BOLLARDS AT FRONT OF PROPOSED 8-BAY. PAYMENT FOR BUILDING BOLLARDS IS INCIDENTAL TO ITEM 800.01.

SITE BOLLARD DETAIL
NOT TO SCALE

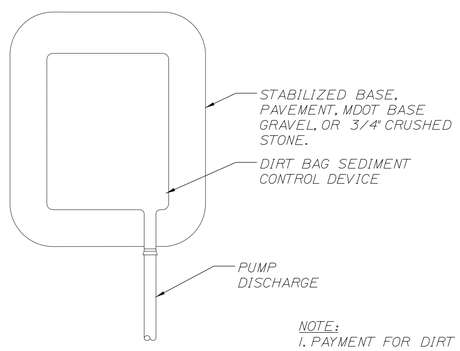


NOTES:
1) INSTALL CRUSHED STONE AROUND UNPAVED PERIMETER OF GENERATOR PAD. SEE ABOVE GROUND PROPANE GAS TANK FARM DETAIL.

GENERATOR PAD
NOT TO SCALE

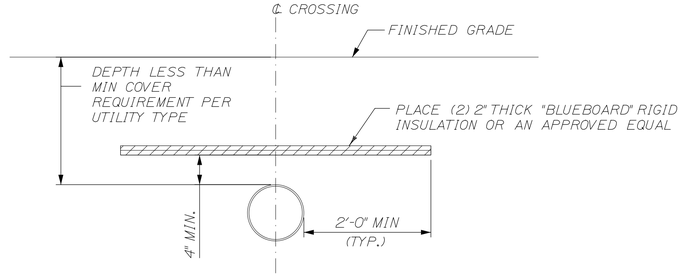


PAVEMENT SAWCUT
NOT TO SCALE



DIRT BAG PUMP OUTLET
NOT TO SCALE

NOTE:
1. PAYMENT FOR DIRT BAG SEDIMENT CONTROL DEVICE SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.



POLYSTYRENE INSULATION BOARD DETAIL
NOT TO SCALE

NOTES:
1. APPLIES TO WATER LINE, DRAINS, AND SANITARY SEWER.
2. PIPE SHALL BE CENTERED UNDER INSULATION UNLESS OTHERWISE SPECIFIED.
3. BOARDS SHALL BE STAGGERED SO TRANSVERSE JOINTS OF FIRST LAYER ARE COVERED BY SECOND LAYER.
4. POLYSTYRENE INSULATION BOARD INSTALLTION WILL NOT BE MEASURED FOR PAYMENT SEPARATELY, BUT SHALL BE INCIDENTAL TO THE RESPECTIVE UNDERDRAIN OR PVC PIPE ITEM.

Filename: 0XX_Details3.dgn

Scale: 50 0 50 100
Scale of Feet

No.	Revision	By	Date

Designed by:

HNTB

CONSULTANT PROJECT MANAGER: Timothy R. Cote, P.E.

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

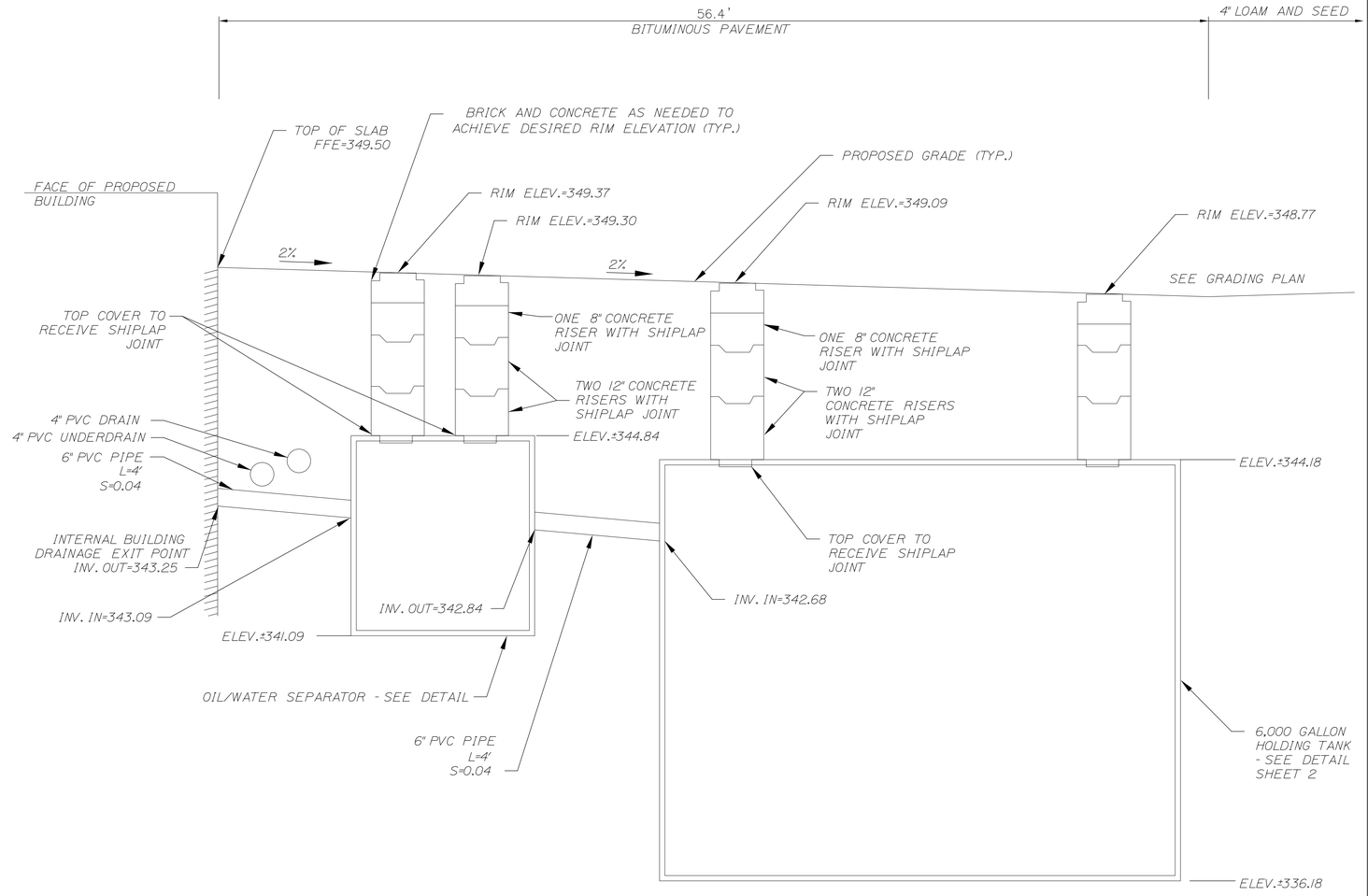
MTA PROJECT MANAGER: Brian Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

DETAILS SHEET 3

SHEET NUMBER: C-403

CONTRACT:2022.08



HOLDING TANK AND OIL/WATER SEPARATOR DETAIL

NOT TO SCALE

NOTE:
DESIGN SHOWN IS FOR ILLUSTRATIVE PURPOSES. CONTRACTOR IS RESPONSIBLE FOR DESIGN, FURNISHING, AND INSTALLATION OF HOLDING TANK AND OIL/WATER SEPARATOR. REFER TO SPECIAL PROVISION 604 FOR ADDITIONAL INFORMATION.

Date:3/2/2022

Filename: 0XX_Details4.dgn

Scale: 50 0 50 100
Scale of Feet

No.	Revision	By	Date

Designed by: HNTB

CONSULTANT PROJECT MANAGER: Timothy R. Cote, P.E.

	By	Date		By	Date
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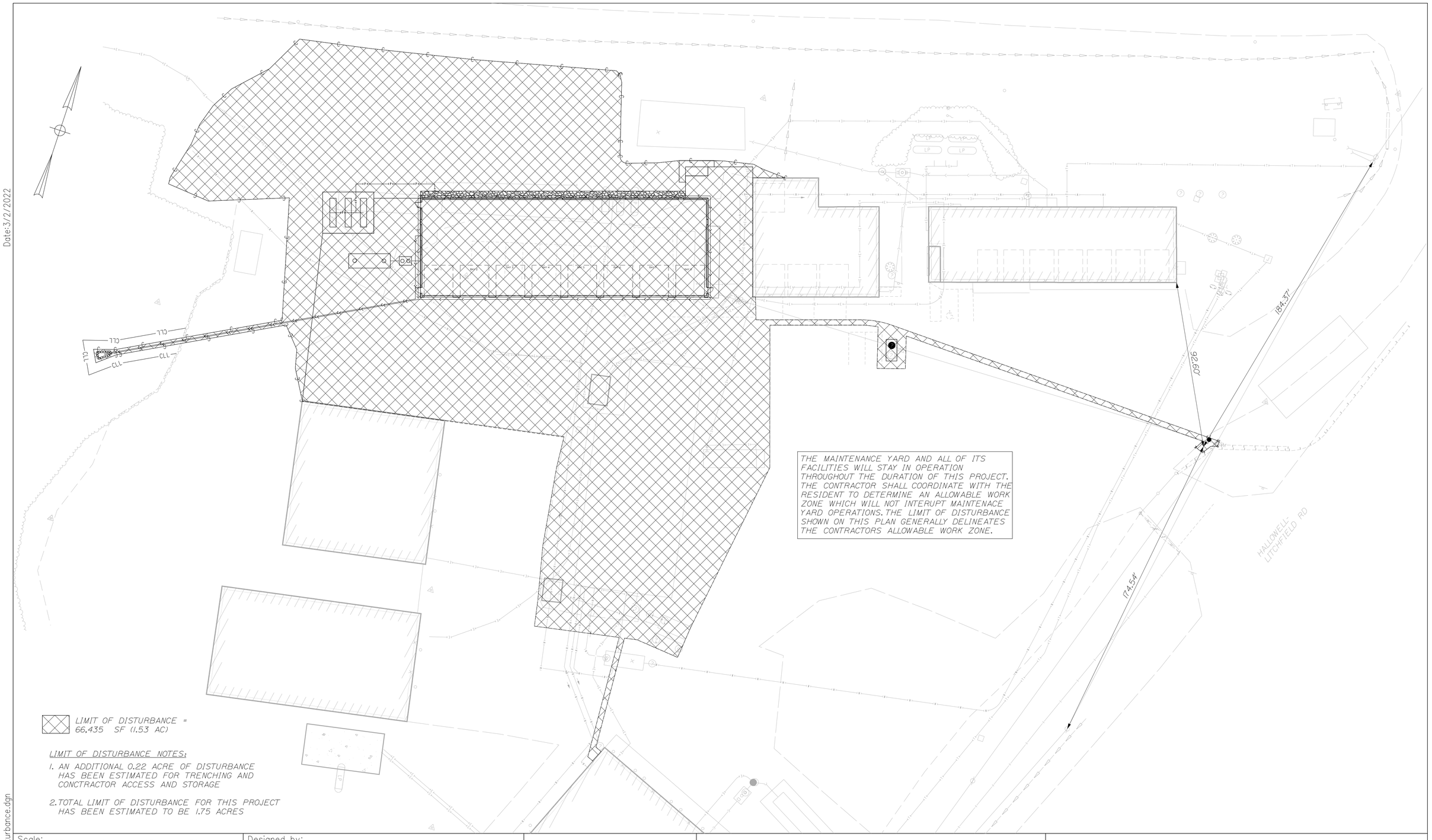
LITCHFIELD 8-BAY GARAGE REPLACEMENT

OIL/WATER SEPARATOR DETAIL

SHEET NUMBER: C-404

CONTRACT:2022.08

Date:3/2/2022



THE MAINTENANCE YARD AND ALL OF ITS FACILITIES WILL STAY IN OPERATION THROUGHOUT THE DURATION OF THIS PROJECT. THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT TO DETERMINE AN ALLOWABLE WORK ZONE WHICH WILL NOT INTERUPT MAINTENACE YARD OPERATIONS. THE LIMIT OF DISTURBANCE SHOWN ON THIS PLAN GENERALLY DELINEATES THE CONTRACTORS ALLOWABLE WORK ZONE.

LIMIT OF DISTURBANCE = 66,435 SF (1.53 AC)

LIMIT OF DISTURBANCE NOTES:

1. AN ADDITIONAL 0.22 ACRE OF DISTURBANCE HAS BEEN ESTIMATED FOR TRENCHING AND CONCTRACTOR ACCESS AND STORAGE

2. TOTAL LIMIT OF DISTURBANCE FOR THIS PROJECT HAS BEEN ESTIMATED TO BE 1.75 ACRES

Scale: 25 0 25 50
Scale of Feet

No.	Revision	By	Date

Designed by: HNTB

CONSULTANT PROJECT MANAGER: Timothy R. Cote, P.E.

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LITCHFIELD 8-BAY GARAGE REPLACEMENT

LIMIT OF DISTURBANCE

SHEET NUMBER: C-405

CONTRACT:2022.08

Filename: 0XX_Limit of Disturbance.dgn

CODE ANALYSIS

NFPA 101 Life Safety Code - 2021 Edition

Building Classification:	Storage - 8,800 sf
Hazard Classification:	Ordinary Hazard
Construction Type:	Type II (000)
Occupant Loads:	Storage - NA

Building Uses	Storage
Non-Sprinkled Building	
Max. Allowable Travel Distance:	200'
Max. Allowable Common Path:	50'
Max. Dead End Corridor Length:	50'
Minimum Number of Required Exits	2
Minimum Separation of exits:	0.5 diagonal'
Minimum Egress Door Width:	36"
Exit Lighting:	Required
Emergency Lighting:	Required
Fire Alarm System:	Not Required
Fire Sprinkler System:	Not Required
Portable Fire Extinguishers:	Required

2018 International Building Code

Use Group Classification:	Storage - Use Group S2
Construction:	Type II - Non-Combustible, Unprotected
Occupant Loads:	8,800 sf 52 @ 500 sf/occ = 18 occupants

Building Limitations	Non-Sprinkled
Construction Type:	IIB Unprotected
Maximum Height:	3 stories / 55'
Maximum Area / Floor:	39,000 sf
Fire Resistance Ratings	
Load Bearing Exterior Walls:	None
Minimum Number of Exits:	2
Maximum Dead-End Corridor Length:	20'
Maximum Common Travel Path:	75'
Maximum Travel Distance:	300'
Fire Alarm System:	Not Required
Fire Sprinkler System:	Not Required (less than 24,000 sf)
Portable Fire Extinguishers:	Required
Exit Lighting	Required
Emergency Lighting	Required
Building Live Loads	
Storage:	125 psf @ light; 250 psf @ heavy

MUBEC (Maine Uniform Building Energy Code) MINIMUM INSULATION VALUES
Per 2021 IECC; Table C402.1.3, C402.1.4 and C402.4

ZONE 6	R-VALUE	U-FACTOR	SHGC
Metal Building			
Roof	R-25 + R-11 LS	0.031	NA
Exterior Wall	R-13+ R-14 ci	0.069	NA
Mass Wall above Grade	R-13.3 ci	0.080	NA
Mass Wall below Grade	R-10 ci	0.10	NA
Unheated Slab (24" band)	R-10	0.10	NA
Doors - Swinging		0.37	NA
Doors - Overhead (<14% glass)	R-4.75	0.21	NA
Windows - Fixed		0.34	0.38

LS = Liner System
c.i. - Continuous Insulation

End of Analysis

ABBREVIATIONS

AFF	ABOVE FINISH FLOOR	G	GRANITE	PB	PANIC BAR
ALUM or AL	ALUMINUM	GA	GAUGE	PL	PLATE
AWP	ACOUSTICAL WALL PANEL	GALV	GALVANIZED	PLY WD	PLYWOOD
		GB	GRAB BARS	PNL	PANEL
BIT	BITUMINOUS	GC	GENERAL CONTRACTOR	PS	PASSAGE LATCH SET
BM	BENCH MARK	GWB	GYPSUM WALL BOARD	P.T.	PRESSURE TREATED
BOT	BOTTOM			PT & D	PAPER TOWEL & WASTE DISPENSER
BRG	BEARING	HC	HANDICAP	PTN	PARTITION
BRK	BRICK	HD WD	HARDWOOD		
		HDR	HEADER	RD	ROOF DRAIN
C	CARPET	HDWE	HARDWARE	RE	REFER
CAB	CABINET	HM	HOLLOW METAL	REF	REFRIGERATOR
CB	CHALK BOARD	HORIZ	HORIZONTAL	REINF	REINFORCED
CC	CENTER TO CENTER	HT	HEIGHT	REQ'D	REQUIRED
CH	CONCRETE FLOOR WITH HARDENER			RM	ROOM
CJ	CONTROL JOINT	ID	INSIDE DIAMETER	RO	ROUGH OPENING
CL	CENTER LINE	IF	INSIDE FACE		
CLG	CEILING	IN	INCHES	S	SOUTH
CMU	CONCRETE MASONRY UNIT	INSUL	INSULATION	SAT	SUSPENDED ACOUSTICAL TILE CEILING
CONC	CONCRETE	INT	INTERIOR		
CONT	CONTINUOUS			SC	SHOWER CURTAIN
CONST	CONSTRUCTION	JNT or JT	JOINT	SD	SOAP DISPENSER
CONTR	CONTRACTOR			SCHED	SCHEDULE
CT	CERAMIC TILE	KEC	KITCHEN EQUIPMENT CONSULTANT	SECT	SECTION
		KP	KICK PLATE	SGB	SUSPENDED GYPSUM BOARD CEILING
DBL	DOUBLE	L	LAVATORY	SHT	SHEET
DC	DOOR CLOSER	LAB	LABEL (FIRE)	SIM	SIMILAR
DIA	DIAMETER	LNTL	LINTEL	SND	SANITARY NAPKIN DISPOSAL
DIM	DIMENSION	LOC	LOCATION	SPEC	SPECIFICATIONS
DNA	DOES NOT APPLY	LS	LOCKSET	SQ	SQUARE
DR	DOOR			SSS	SYNTHETIC SPORTS SURFACE
DTL	DETAIL	M	MARBLE	STD	STANDARD
DWG	DRAWING	MAS	MASONRY	STL	STEEL
		MAX	MAXIMUM	STRUCT	STRUCTURAL
E	EAST	MB	MARKER BOARD	STV	STRAIGHT VINYL BASE
EA	EACH	MECH	MECHANICAL	SV	SHEET VINYL
EF	EACH FACE	MFGR	MANUFACTURER		
EJ	EXPANSION JOINT	MIN	MINIMUM	T	TEMPERED (GLASS)
EL	ELEVATION	MISC	MISCELLANEOUS	TB	TACK BOARD
ELEC	ELECTRICAL	MO	MASONRY OPENING	TH	THERMAL (INSULATED)
ELEV	ELEVATOR	MR	MOP OPENING	THK	THICKNESS
EMHO	ELECTROMAGNETIC HOLD OPEN	MRGB	MOISTURE RESISTANT GYPSUM BOARD	TO	TOP OF
EQ	EQUAL	MTL	METAL	TOB	TOP OF BEAM
EW	EACH WAY			TOM	TOP OF MASONRY
EWC	ELECTRIC WATER COOLER	N	NORTH	TOW	TOP OF WALL
EXIST OF (E)	EXISTING	NA	NOT APPLICABLE	TP	TOILET PAPER DISPENSER
EXP	EXPANSION	NIC	NOT IN CONTRACT	TYP	TYPICAL
EXT	EXTERIOR	NO	NUMBER		
		NOM	NOMINAL	VB	VAPOR BARRIER
FCS	FLOOR COATING SYSTEM	NTS	NOT TO SCALE	VCT	VINYL COMPOSITION TILE
FD	FLOOR DRAIN			VERT	VERTICAL
FDN	FOUNDATION	OA	OVERALL	VWC	VINYL WALL COVERING
FE	FIRE EXTINGUISHER	OC	ON CENTER		
FFE	FINISH FLOOR ELEVATION	OD	OUTSIDE DIAMETER	W	WEST
FIN	FINISH	OF	OUTSIDE FACE	w/	WITH
FIN FL or FF	FINISH FLOOR	OPNG	OPENING	WC	WATER CLOSET
FIN GR	FINISH GRADE	OPP	OPPOSITE	WD	WOOD
FL	FLOOR			WF	WATER FOUNTAIN
FR	FIRE RATING	P	PAINT	WG	WIRE GLASS
FRMG	FRAMING	PTD	PAINTED	WP	WOOD PANELING
FT	FEET (FOOT)				
FV	FIELD VERIFY				
FWC	FABRIC WALL COVERING				

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO LOCAL AND STATE LAWS, ORDINANCES AND PREVAILING EDITIONS OF ADOPTED BUILDING CODES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE ALL PERMITS FOR WORK.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING THE WORK AND REPORT ANY DISCREPANCIES TO THE ARCHITECT. CONTRACTOR SHALL PROCEED WITH THE WORK ONLY AFTER SUCH DISCREPANCIES HAVE BEEN RESOLVED BY THE ARCHITECT. CONTRACTOR SHALL ALLOW A 48 HOUR TIME FRAME FOR RESOLVING DISCREPANCIES ONCE THE ARCHITECT HAS ACKNOWLEDGED THE CONDITION.
3. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL EXISTING CONDITIONS PRIOR TO STARTING THE WORK IN ANY GIVEN AREA.
4. WORK WITH GIVEN DIMENSIONS AND LARGE SCALE DETAILS. DO NOT SCALE THE DRAWINGS AS THE REPRODUCTIVE PROCESS TENDS TO DISTORT THE ACCURACY OF THE GRAPHIC SCALE INDICATED.
5. ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN A NEAT, SAFE, AND CLEAN MANNER. ALL CONSTRUCTION WASTE SHALL BE REMOVED FROM THE BUILDING. SITE BURNING IS NOT ALLOWED. LEAVE WORK AREA IN A CLEAN, SAFE CONDITION AT THE END OF EACH WORK DAY.
6. ALL CONSTRUCTION DEBRIS SHALL BE DISPOSED OF AT AN APPROVED OFF-SITE FACILITY IN COMPLIANCE WITH ALL REGULATIONS.
7. ALL WOOD IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESERVATIVE TREATED.
8. INSTALL SOLID BLOCKING AT WALL FRAMING BEHIND ALL SURFACE MOUNTED ITEMS.
9. REFER TO THE ACCESSIBILITY DETAIL SHEET FOR AMERICANS WITH DISABILITIES ACT (ADA) AND MAINE HUMAN RIGHTS ACT (MRHA) CONSTRUCTION CRITERIA.

MATERIALS

- CONCRETE
- CONCRETE MASONRY UNIT
- BRICK
- GRAVEL
- SOIL
- STUD PARTITION (EXISTING)
- STEEL
- WOOD FRAMING
- WOOD BLOCKING
- PLYWOOD
- GYPSUM BOARD
- SUSPENDED ACOUSTICAL TILE
- BATT INSULATION
- RIGID INSULATION
- FINISH WOOD
- ONE HOUR RATED PARTITION
- TWO HOUR RATED PARTITION
- EXISTING PARTITION (SCREENED)
- NEW PARTITION

SYMBOLS

- 101 — ROOM NUMBER
- 101 — DOOR NUMBER
- A — WINDOW NUMBER
- A / A7 — BUILDING SECTION
- 1 / A20 — WALL SECTION
- B / A10 — DETAIL SECTION
- 6-A9 — CASEWORK ELEVATION
- 1 / 2 / A6 — INTERIOR ELEVATION
- VERTICAL ELEVATION
- PARTITION TYPE
- STRUCTURAL CENTERLINE

EGRESS SYMBOLS LEGEND

- DIAGONAL DISTANCE
- EGRESS SEPARATION
- EGRESS PATH

NFPA LEGEND

SYMBOL	DESCRIPTION
	EXIT LIGHT
	ABC FIRE EXTINGUISHER w/ BRACKET
	EMERGENCY LIGHT
	EMERGENCY / EXIT LIGHT
	EXTERIOR EMERGENCY LIGHT

Scale: NO SCALE

No.	Revision	By	Date

Designed by: MICHAEL F. HAYS, RA
ISSUED FOR BID

LICENSED ARCHITECT — MICHAEL F. HAYS No. 1724 — STATE OF MAINE — Michael F. Hays

	By	Date		By	Date
Designed:	MFH	03/01/2022	Checked:	MFH	03/01/2022
Drawn:	MGK	03/01/2022			

GRANT HAYS ASSOCIATES
ARCHITECTURE & INTERIOR DESIGN
P.O. BOX 6179 FALMOUTH MAINE 04105
207.871.5900 www.granthays.com

AEI PROJ.NO.: 21116 | CAD FILE:

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

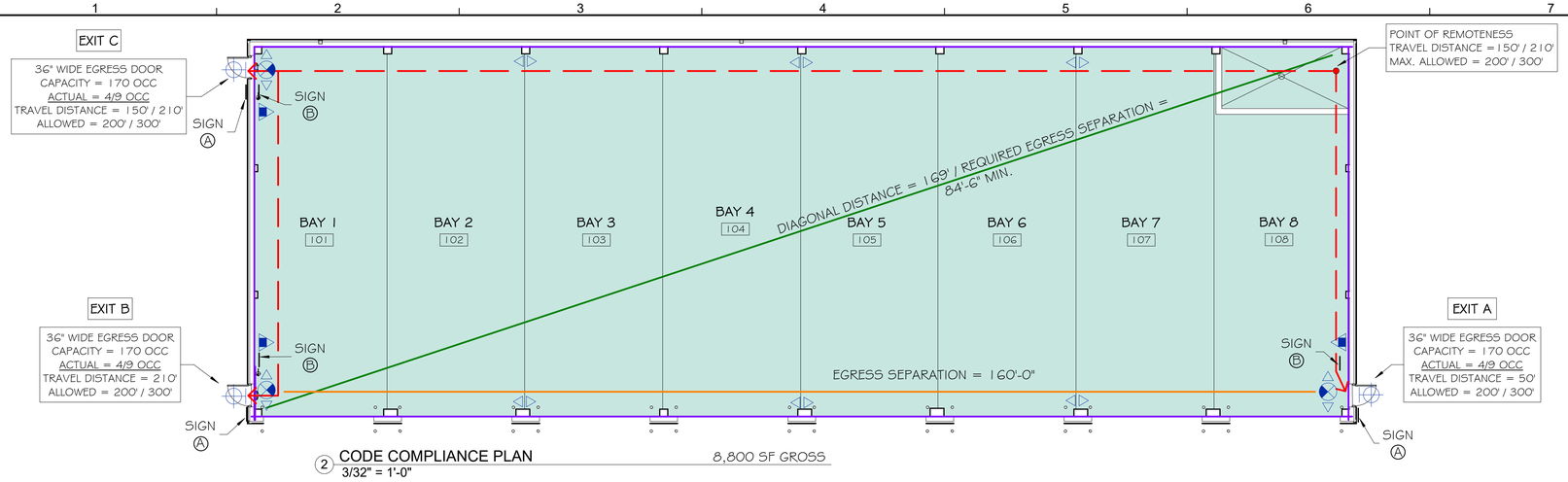
LITCHFIELD 8-BAY GARAGE REPLACEMENT

ARCHITECTURAL COVER SHEET

CONTRACT: 2022.08

SHEET NUMBER: A-0

11 OF 35



2 CODE COMPLIANCE PLAN — 8,800 SF GROSS
3/32" = 1'-0"

EGRESS SYMBOLS LEGEND

- DIAGONAL DISTANCE
- EGRESS SEPARATION
- EGRESS PATH

NFPA LEGEND

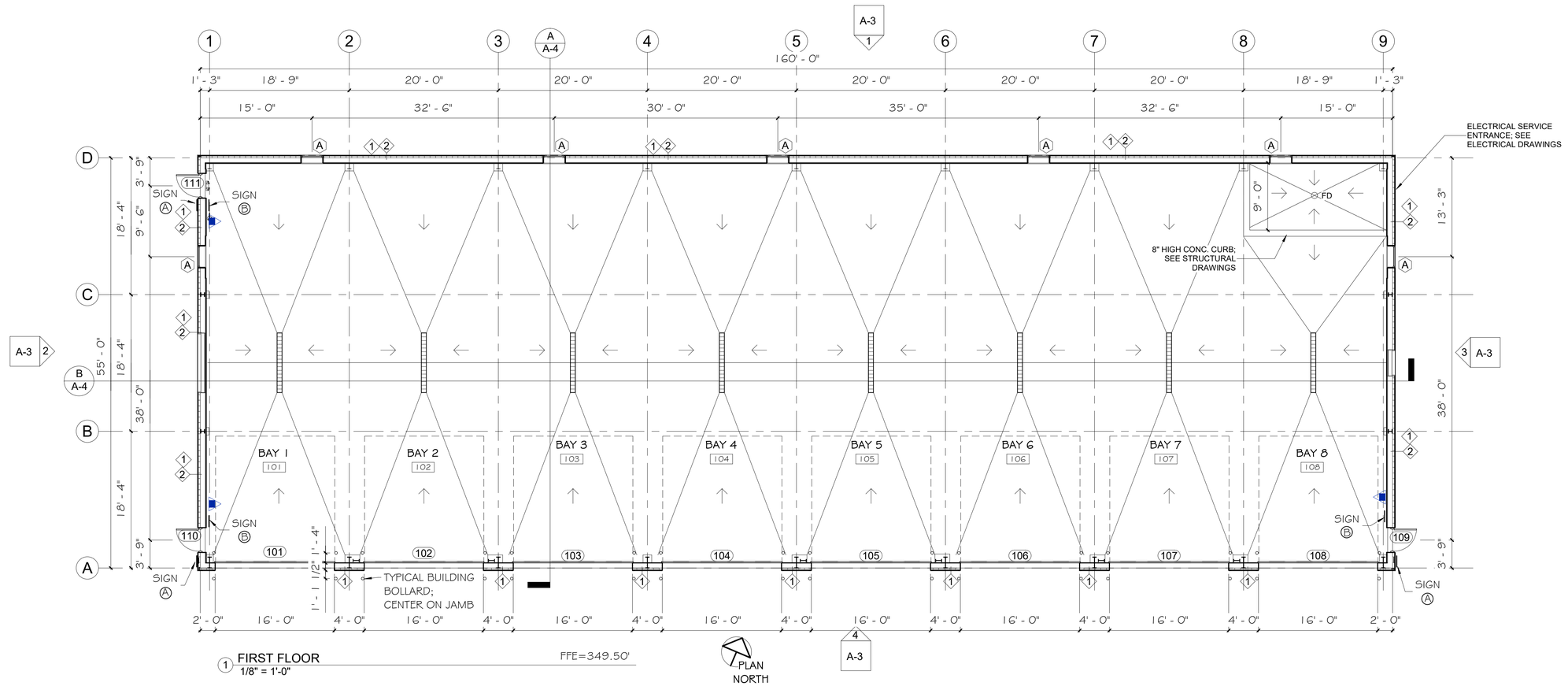
SYMBOL	DESCRIPTION
	EXIT LIGHT
	ABC FIRE EXTINGUISHER w/ BRACKET
	EMERGENCY LIGHT
	EMERGENCY / EXIT LIGHT
	EXTERIOR EMERGENCY LIGHT

OCCUPANT LOADS

IBC 2018	18 (8 MAX. ACTUAL)
NFPA 2021	8 (MP)

NOTES

1. SEE SHEET A-8 FOR ACCESSIBILITY DETAILS & NOTES.
2. SEE SHEET A-8 FOR ADA SIGNAGE.
3. SEE SHEET A-8 ACCESSIBILITY DETAILS AND NOTES FOR MOUNTING HEIGHTS OF LIFE SAFETY DEVICES.



1 FIRST FLOOR — FFE=349.50'
1/8" = 1'-0"

WALL TYPES

1	1 / A7
2	2 / A7

Scale:	Designed by:						
As indicated	MICHAEL F. HAYS, RA ISSUED FOR BID						
			By	Date		By	Date
		Designed:	MFH	03/01/2022	Checked:	MFH	03/01/2022
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No.	Revision	By	Date

LICENSED ARCHITECT — MICHAEL F. HAYS No. 1724 — STATE OF MAINE

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P.O. BOX 6179 FALMOUTH MAINE 04105
207.871.7900 www.granthays.com

AEI PROJ.NO.: 21116 | CAD FILE:

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MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

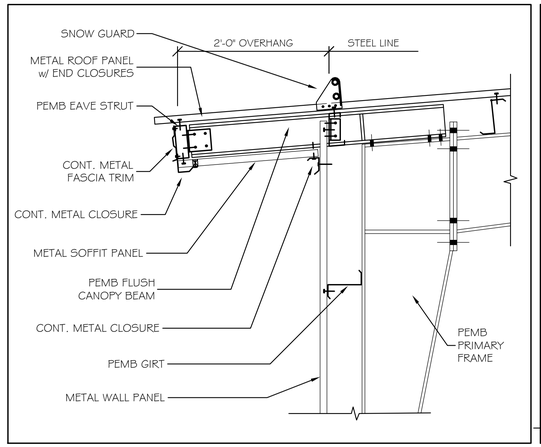
LITCHFIELD 8-BAY GARAGE REPLACEMENT

CODE COMPLIANCE & FIRST FLOOR PLANS

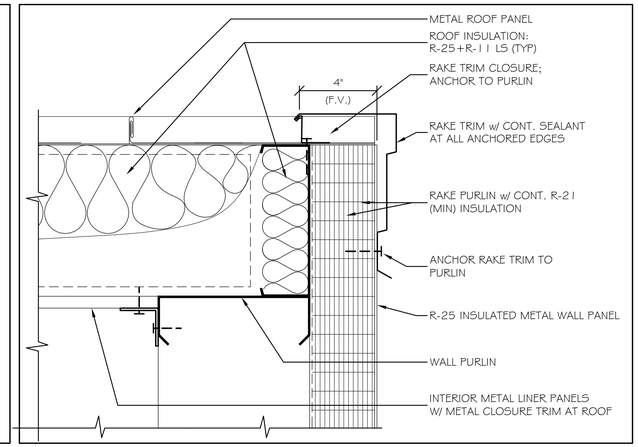
SHEET NUMBER: A-1

CONTRACT: 2022.08

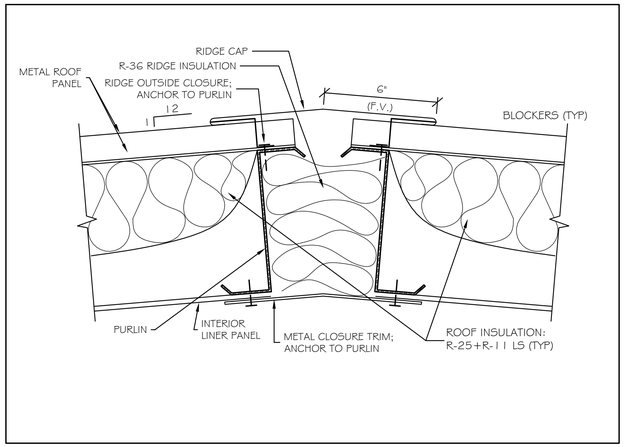
12 OF 35



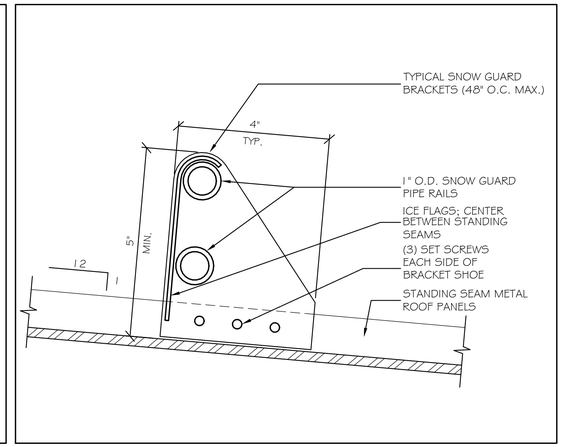
(2) OVERHANG DETAIL 1"= 1'-0"



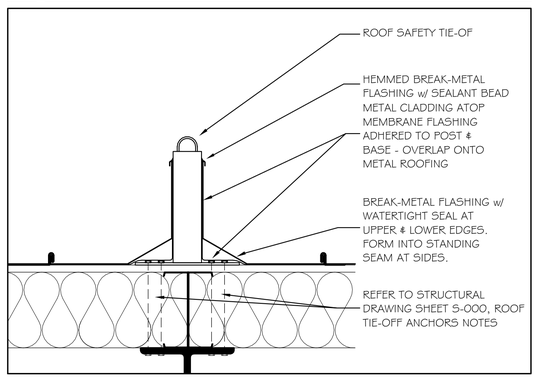
(3) RAKE DETAIL 3" = 1'-0"



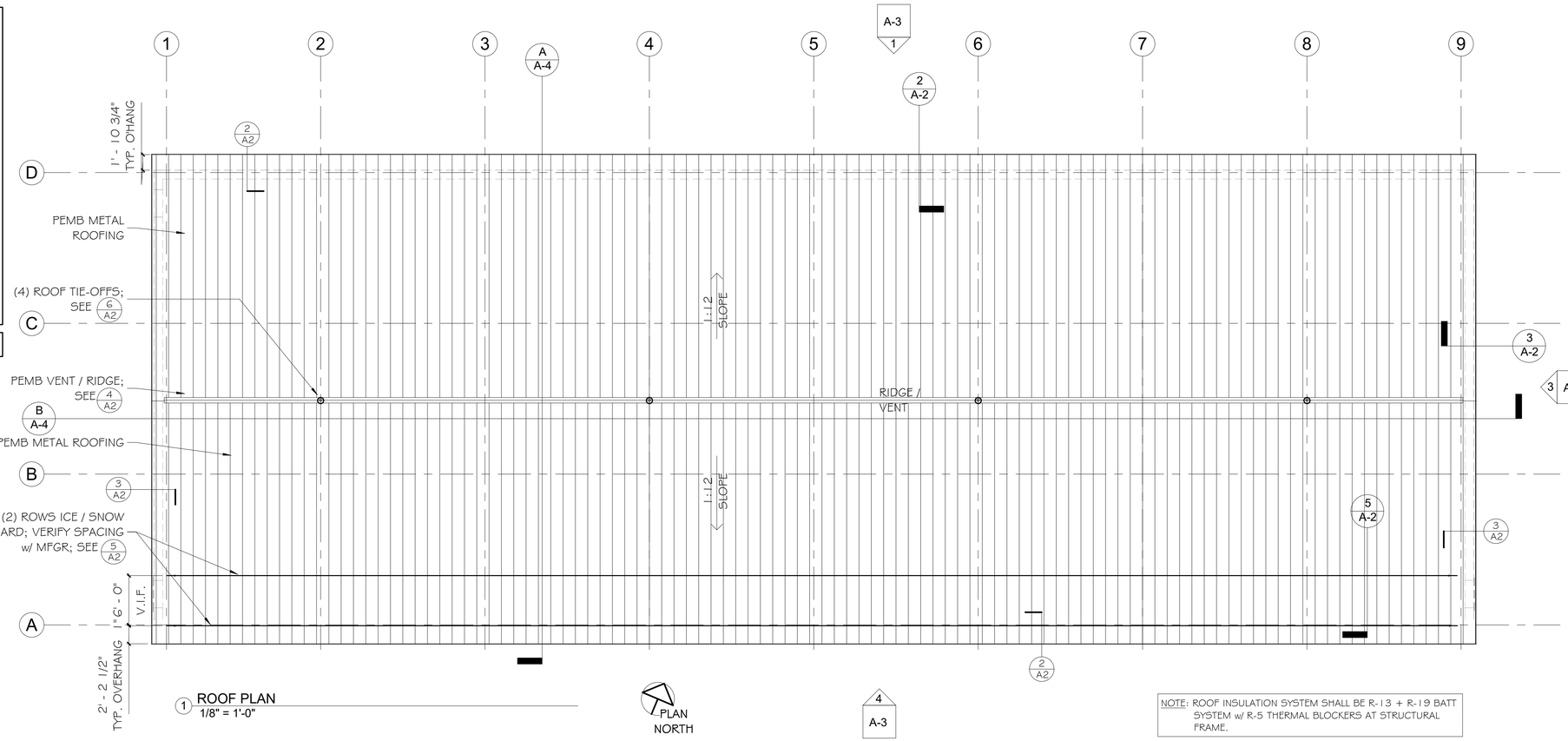
(4) RIDGE DETAIL 3" = 1'-0"



(5) ICE / SNOW GUARD DETAIL HALF SIZE



(6) FLASHING AT ROOF SAFETY TIE-OFF 1½"= 1'-0"



1 ROOF PLAN
1/8" = 1'-0"

PLAN NORTH

4 A-3

NOTE: ROOF INSULATION SYSTEM SHALL BE R-13 + R-19 BATT SYSTEM w/ R-5 THERMAL BLOCKERS AT STRUCTURAL FRAME.

Scale: As indicated

No.	Revision	By	Date

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207.871.5900 www.granthays.com

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

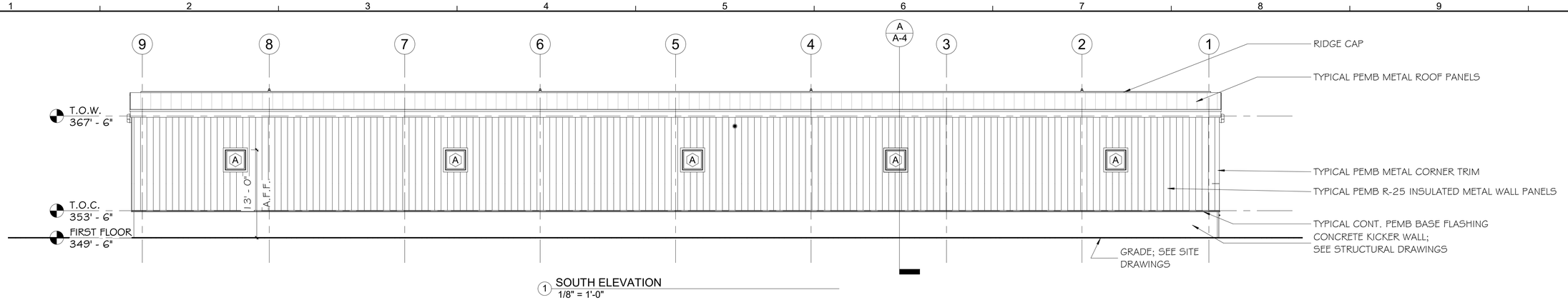
MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

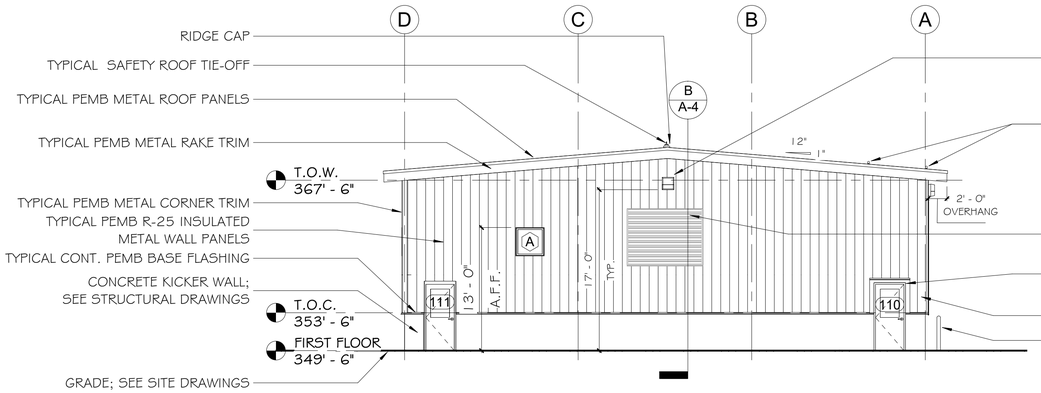
ROOF PLAN & DETAILS

SHEET NUMBER: A-2

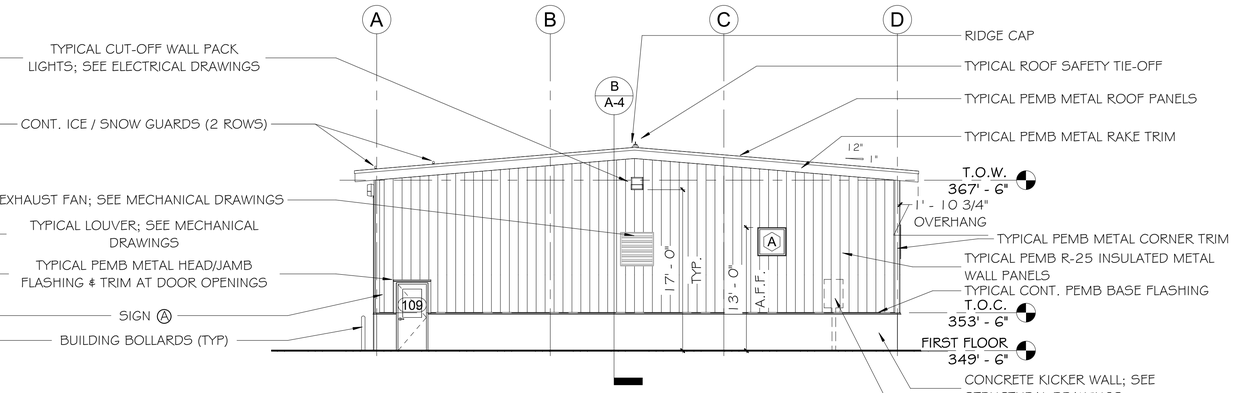
CONTRACT: 2022.08



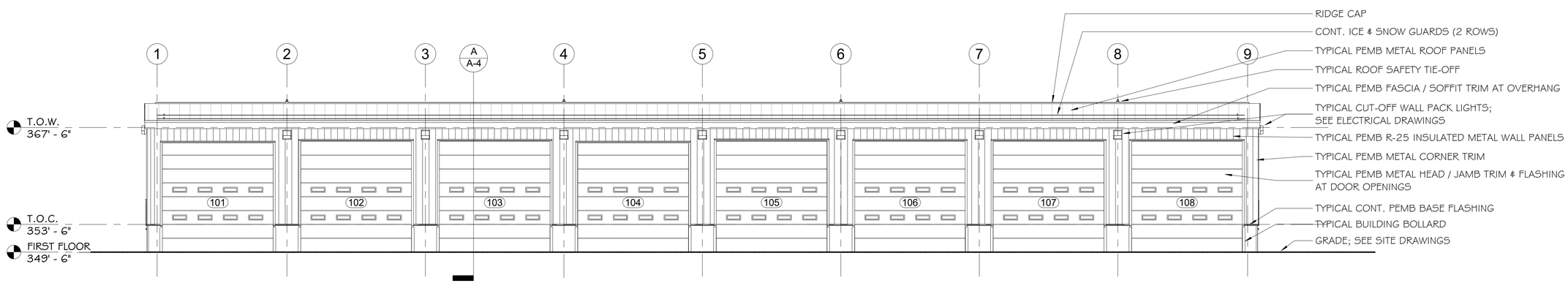
1 SOUTH ELEVATION
1/8" = 1'-0"



2 EAST ELEVATION
1/8" = 1'-0"



3 WEST ELEVATION
1/8" = 1'-0"



4 NORTH ELEVATION
1/8" = 1'-0"

Scale:
1/8" = 1'-0"

No.	Revision	By	Date

Designed by:

MICHAEL F. HAYS, RA
ISSUED FOR BID

LICENSED ARCHITECT
MICHAEL F. HAYS
No. 1724
STATE OF MAINE

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MAINE TURNPIKE

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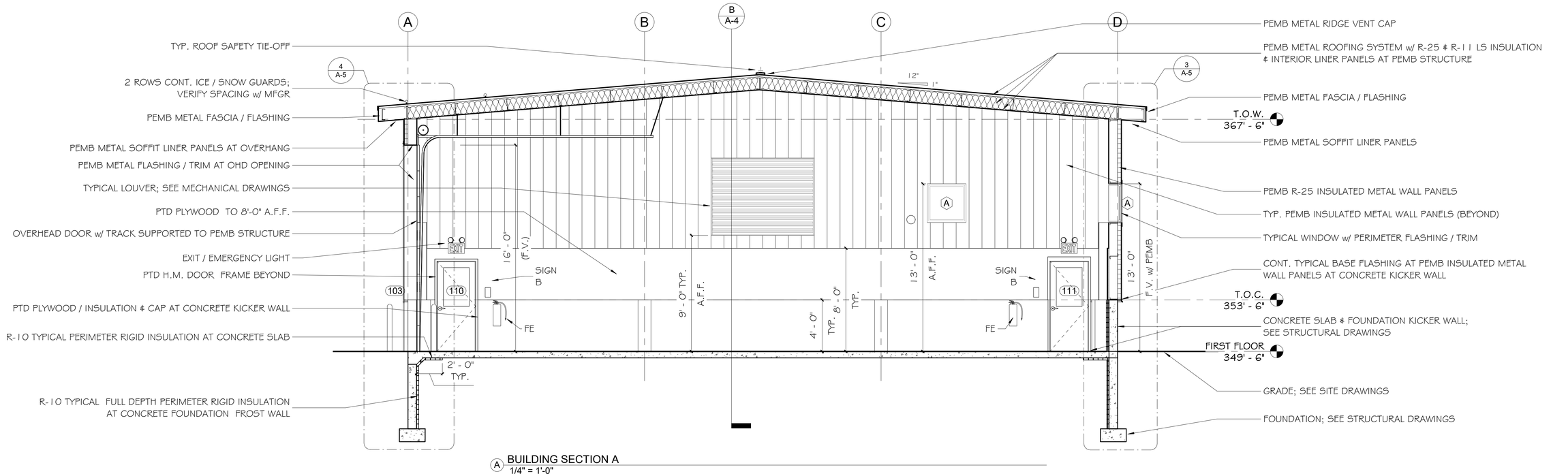
MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

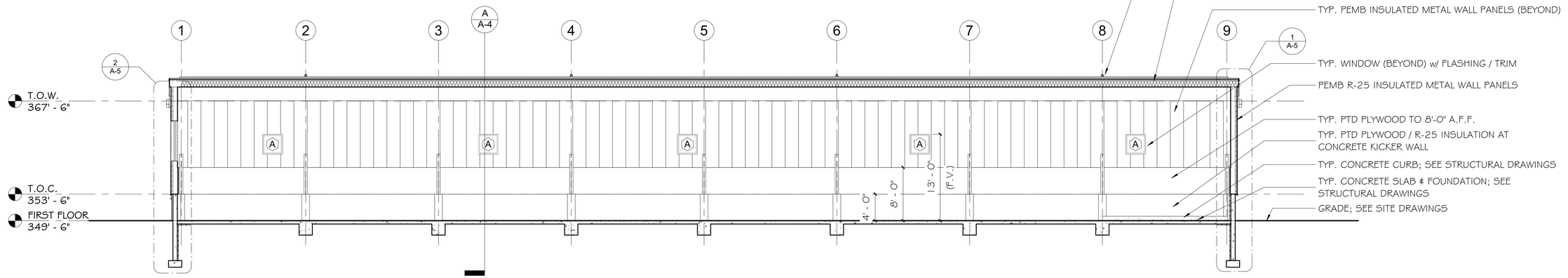
ELEVATIONS

SHEET NUMBER: A-3

CONTRACT: 2022.08



A BUILDING SECTION A
1/4" = 1'-0"



B BUILDING SECTION B
1/8" = 1'-0"

Scale:
As indicated

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MICHAEL F. HAYS, RA
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LICENSED ARCHITECT MICHAEL F. HAYS No. 1724 STATE OF MAINE

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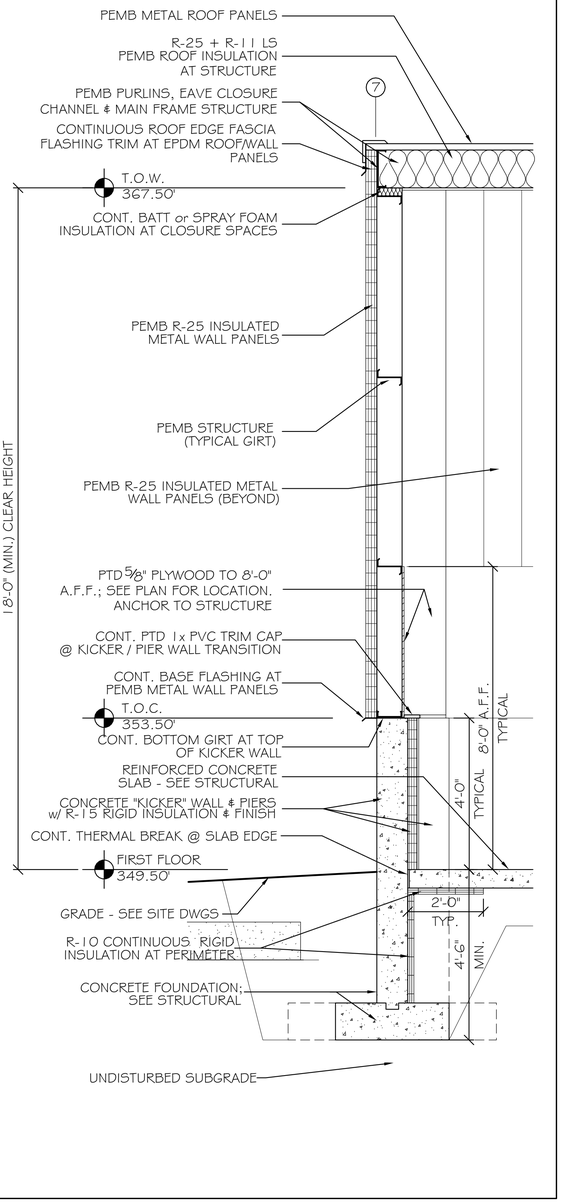
MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

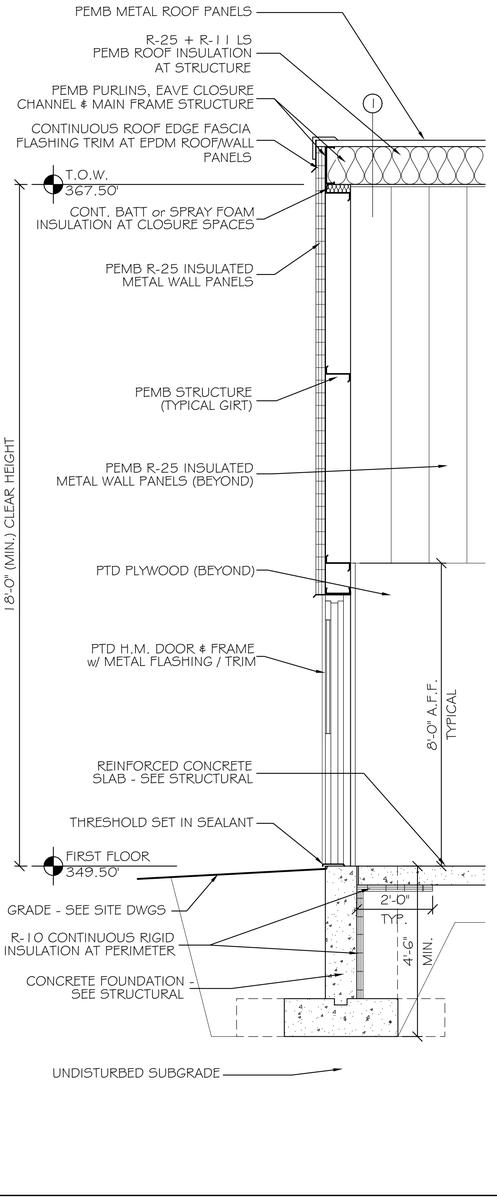
BUILDING SECTIONS

SHEET NUMBER: A-4

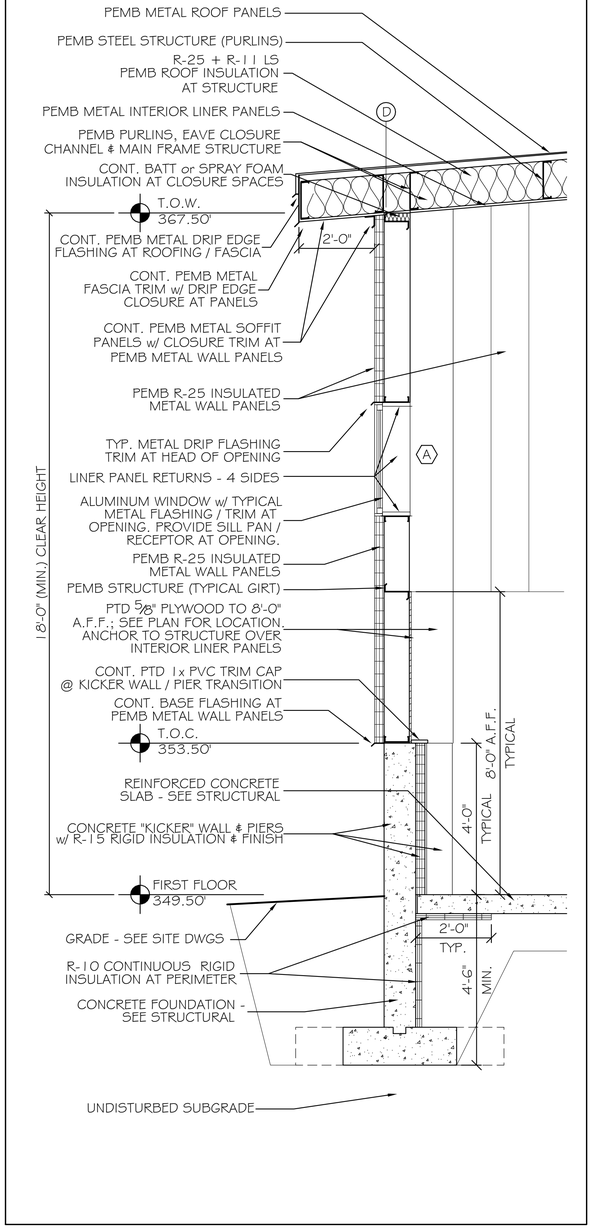
CONTRACT: 2022.08



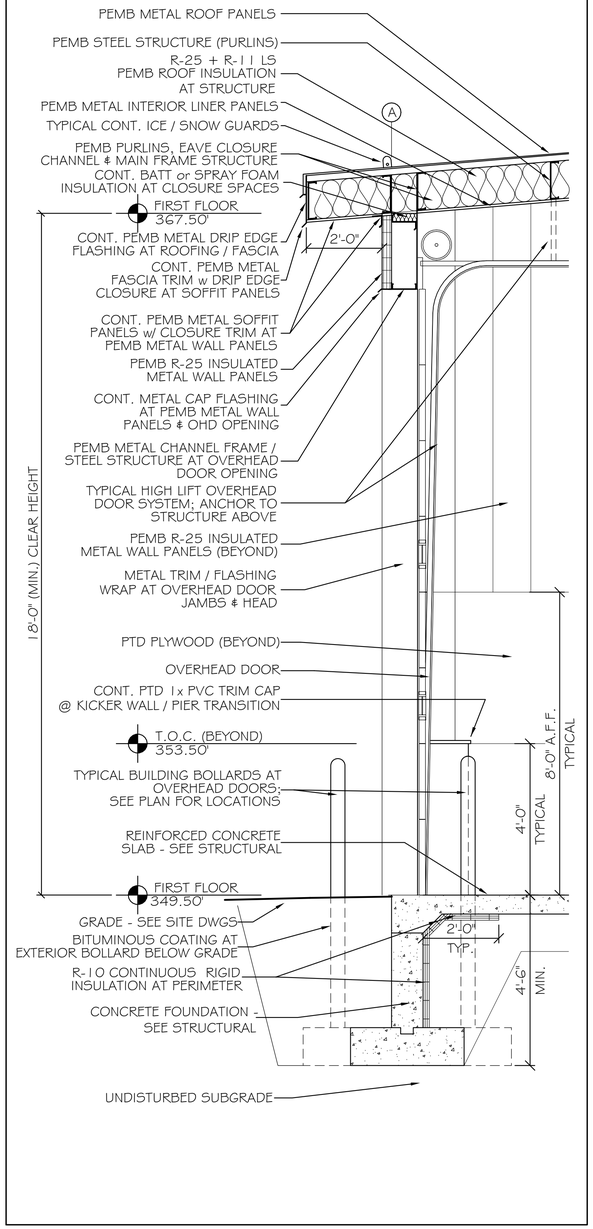
① TYPICAL WALL SECTION ½" = 1'-0"



② TYP. WALL SECTION AT H.M. DOOR ½" = 1'-0"



③ TYP. WALL SECTION AT WINDOW ½" = 1'-0"



④ TYP. WALL SECTION AT OVERHEAD DOOR ½" = 1'-0"

Scale:

As indicated

No.	Revision	By	Date

Designed by:

MICHAEL F. HAYS, RA

ISSUED FOR BID

LICENSED ARCHITECT MICHAEL F. HAYS No. 1724 STATE OF MAINE

	By	Date		By	Date
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Drawn:	MGK	03/01/2022			

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ARCHITECTURE & INTERIOR DESIGN
P.O. BOX 6179 FALMOUTH MAINE 04105
207.871.5900 www.granthays.com

AEI PROJ.NO.: 21116 | CAD FILE:

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

WALL SECTIONS

SHEET NUMBER: A-5

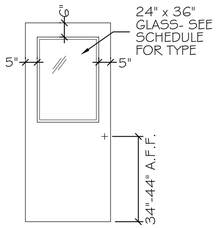
CONTRACT: 2022.08

DOOR SCHEDULE

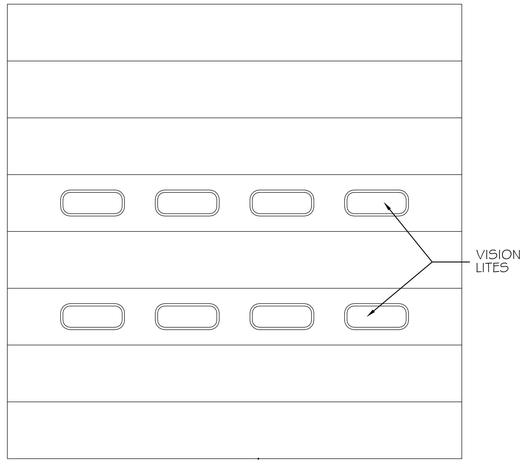
ABBREVIATIONS

ALUM AL	ALUMINUM	MAS	MASONRY
DW	DRYWALL	MFGR	MANUFACTURER
ES	EDGE STRIP	OCD	OVERHEAD COILING DOOR
EMHO	ELECTRO MAGNETIC HOLD OPENER	OHD	OVERHEAD DOOR
		T	TEMPERED
GL	GLASS	T-BREAK	THERMAL BREAK
HM	HOLLOW METAL	TH	THERMAL INSULATED
INSUL	INSULATED	TS	TRANSITION STRIP

NO.	TYPE	SIZE (w x h)	THK.	INSUL	HDWE	FR	GLASS TYPE	GLASS SIZE	REMARKS	FRAMES TYPE	FR	PROFILE	DETAILS HEAD	DETAILS JAMB	THRESHOLDS MATERIAL	DETAILS SILL	DETAILS FIN
101	B	16'x16' OHD	MFGR	YES	MFGR	—	MFGR	MFGR		B	—	MAS	5-A7	6-A7	—	—	7-A7
102	B	16'x16' OHD	MFGR	YES	MFGR	—	MFGR	MFGR		B	—	MAS	5-A7	6-A7	—	—	7-A7
103	B	16'x16' OHD	MFGR	YES	MFGR	—	MFGR	MFGR		B	—	MAS	5-A7	6-A7	—	—	7-A7
104	B	16'x16' OHD	MFGR	YES	MFGR	—	MFGR	MFGR		B	—	MAS	5-A7	6-A7	—	—	7-A7
105	B	16'x16' OHD	MFGR	YES	MFGR	—	MFGR	MFGR		B	—	MAS	5-A7	6-A7	—	—	7-A7
106	B	16'x16' OHD	MFGR	YES	MFGR	—	MFGR	MFGR		B	—	MAS	5-A7	6-A7	—	—	7-A7
107	B	16'x16' OHD	MFGR	YES	MFGR	—	MFGR	MFGR		B	—	MAS	5-A7	6-A7	—	—	7-A7
108	B	16'x16' OHD	MFGR	YES	MFGR	—	MFGR	MFGR		B	—	MAS	5-A7	6-A7	—	—	7-A7
109	A	3' x 7'	1 3/4"	YES	HW-1	—	T / TH	24" x 36"		A		MAS	9-A7	10-A7	ALUM	11-A7	—
110	A	3' x 7'	1 3/4"	YES	HW-1	—	T / TH	24" x 36"		A	—	MAS	9-A7	10-A7	ALUM	11-A7	—
111	A	3' x 7'	1 3/4"	YES	HW-1	—	T / TH	24" x 36"		A	—	MAS	9-A7	10-A7	ALUM	11-A7	—



Ⓐ H.M. FLUSH DOOR



Ⓑ SECTIONAL OVERHEAD DOOR w/ RECTANGULAR VISION LITES

DOOR TYPES

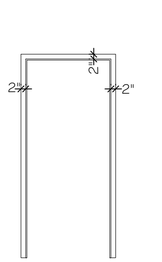
3/8" = 1'-0"

WINDOW SCHEDULE

ABBREVIATION

MFGR MANUFACTURER

NO.	TYPE	MANUFACTURER MFGR	MANUFACTURER MODEL	NOMINAL SIZE WIDTH	NOMINAL SIZE HEIGHT	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	DETAILS MUNT	DETAILS MULL	REMARKS
A	FIXED	VINYL	MFGR	3'-0"	3'-0"	13-A7	14-A7	15-A7	—	—	LOW 'E' INSULATED GLASS

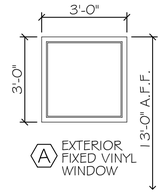


Ⓐ PTD H.M. MASONRY PROFILE, 2" x 5 3/4"

Ⓑ PTD H.M. CHANNEL FRAME

FRAME TYPES

3/8" = 1'-0"



Ⓐ EXTERIOR FIXED VINYL WINDOW

NOTE:
FIELD VERIFY R.O. HEAD/SILL HEIGHT w/ PEMB STRUCTURE

WINDOW TYPE

3/8" = 1'-0"

FINISH SCHEDULE

ABBREVIATIONS

CH	CONCRETE w/ HARDENER	IMP	INSULATED METAL PANEL
CMU	CONCRETE MASONRY UNIT	MLP	METAL LINER PANEL
DFP	DRY FALL PAINT	P	PAINT
E	EXISTING	RB	RUBBER BASE
EP	EPOXY PAINT	RT	RUBBER TILE
FRP	FIBERGLASS REINFORCED PANELS	SAT	SUSPENDED ACOUSTICAL TILE
FV	FIELD VERIFY	SS	STAINLESS STEEL
GL	GLASS	WD	WOOD
GWB	GYPSUM WALL BOARD		

RM NO.	NAME	WALLS N	WALLS E	WALLS S	WALLS W	FLOORS MAT'L	FLOORS BASE	FLOORS MAT'L	FLOORS BASE	CEILING A TYPE	CEILING A HT.	CEILING B TYPE	CEILING B HT.	REMARKS
101	BAY 1	P / IMP	P / IMP	P / IMP	—	CONC	—	—	—	MLP	STRUCT.	—	—	
102	BAY 2	P / IMP	—	P / IMP	—	CONC	—	—	—	MLP	STRUCT.	—	—	
103	BAY 3	P / IMP	—	P / IMP	—	CONC	—	—	—	MLP	STRUCT.	—	—	
104	BAY 4	P / IMP	—	P / IMP	—	CONC	—	—	—	MLP	STRUCT.	—	—	
105	BAY 5	P / IMP	—	P / IMP	—	CONC	—	—	—	MLP	STRUCT.	—	—	
106	BAY 6	P / IMP	—	P / IMP	—	CONC	—	—	—	MLP	STRUCT.	—	—	
107	BAY 7	P / IMP	—	P / IMP	—	CONC	—	—	—	MLP	STRUCT.	—	—	
108	BAY 8	P / IMP	—	P / IMP	P / IMP	CONC	—	—	—	MLP	STRUCT.	—	—	

Scale: 12" = 1'-0"

No.	Revision	By	Date

Designed by: MICHAEL F. HAYS, RA

ISSUED FOR BID

LICENSED ARCHITECT MICHAEL F. HAYS No. 1724 STATE OF MAINE

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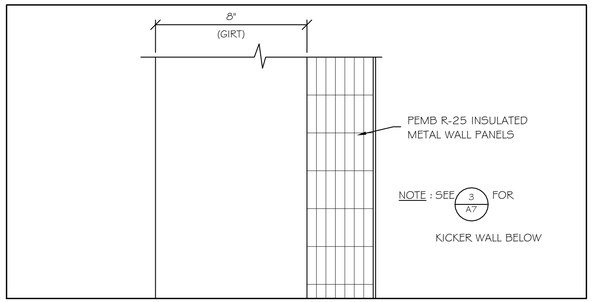
MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

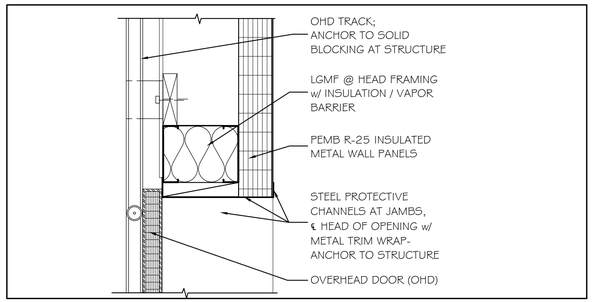
DOOR, WINDOW & FINISH SCHEDULES

SHEET NUMBER: A-6

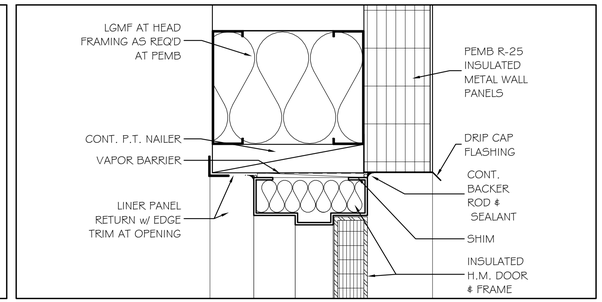
CONTRACT: 2022.08



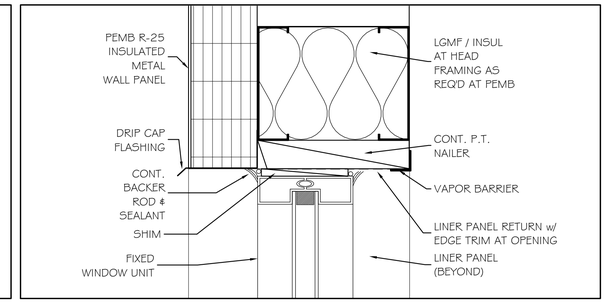
① PARTITION TYPE ◇ 3"= 1'-0"



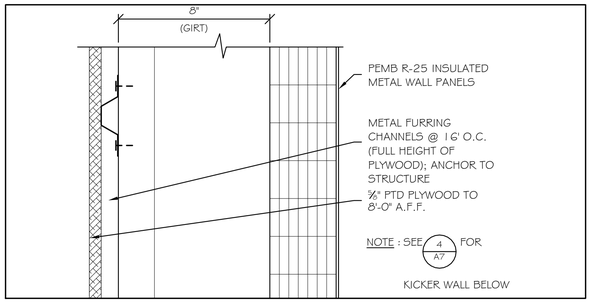
⑤ HEAD AT OVERHEAD SECTIONAL DOOR / PEMB METAL PANEL 1½" = 1'-0"



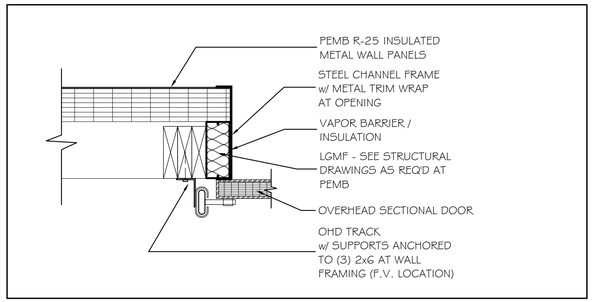
⑨ EXT. H.M. DOOR HEAD DETAIL 3"= 1'-0"



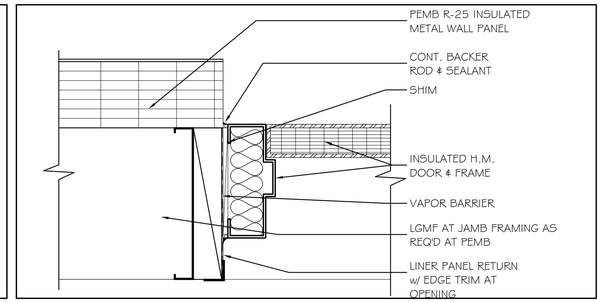
⑬ WINDOW HEAD DETAIL 3"= 1'-0"



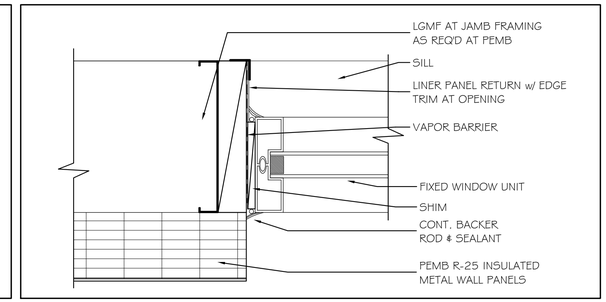
② 3"= 1'-0"



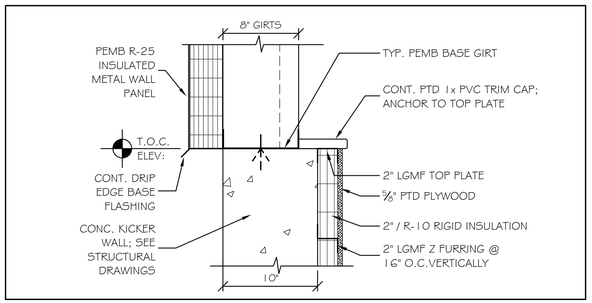
⑥ JAMB AT OVERHEAD SECTIONAL DOOR / PEMB METAL PANEL 1½" = 1'-0"



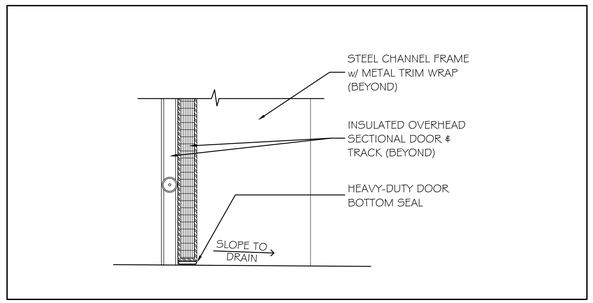
⑩ EXT. H.M. DOOR JAMB DETAIL 3"= 1'-0"



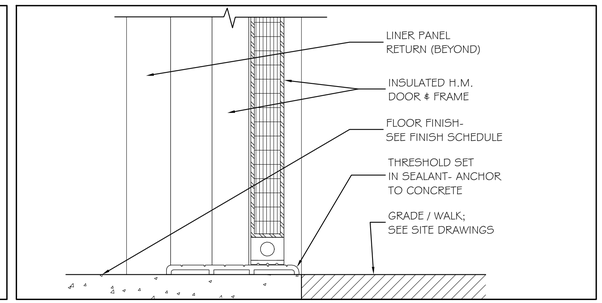
⑭ WINDOW JAMB DETAIL 3"= 1'-0"



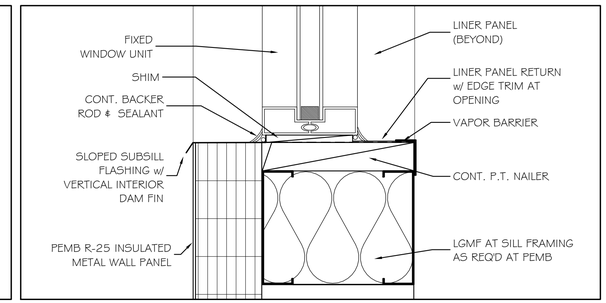
③ KICKER WALL DETAIL 1½" = 1'-0"



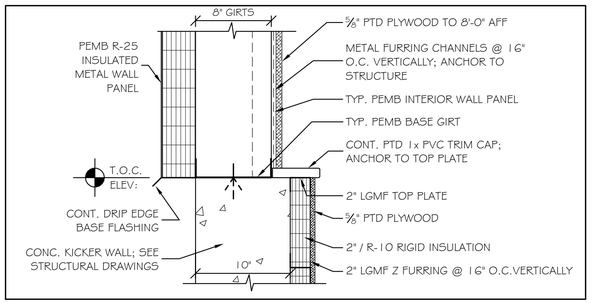
⑦ SILL AT OVERHEAD SECTIONAL DOOR / PEMB METAL PANEL 1½" = 1'-0"



⑪ EXT. H.M. DOOR SILL DETAIL 3"= 1'-0"



⑮ WINDOW SILL DETAIL 3"= 1'-0"



④ KICKER WALL DETAIL 1½" = 1'-0"

⑧

⑫

⑯

Scale:

12" = 1'-0"

No.	Revision	By	Date

Designed by:

MICHAEL F. HAYS, RA

ISSUED FOR BID

LICENSED ARCHITECT MICHAEL F. HAYS No. 1724 STATE OF MAINE

	By	Date		By	Date
Designed:	MFH	03/01/2022	Checked:	MFH	03/01/2022
Drawn:	MGK	03/01/2022			

GRANT HAYS ASSOCIATES
ARCHITECTURE & INTERIOR DESIGN
P.O. BOX 6179 FALMOUTH MAINE 04105
207.871.5900 www.granthays.com

AEI PROJ.NO.: 21116 CAD FILE:

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

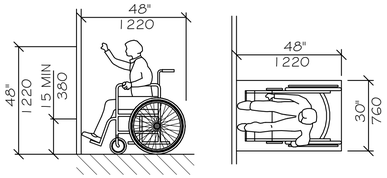
MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

DETAILS

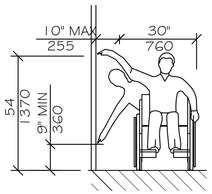
SHEET NUMBER: A-7

CONTRACT: 2022.08



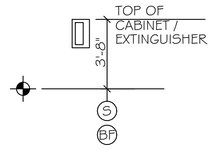
HIGH FORWARD REACH LIMIT

NTS



HIGH AND LOW
SIDE REACH LIMITS

NTS



FIRE EXTINGUISHER
CABINET (FEC)

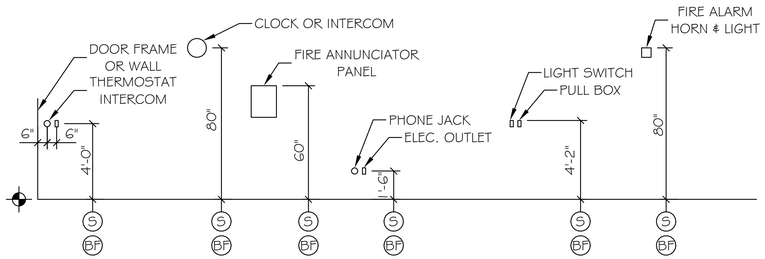
NTS

LEGEND

- (S) STANDARD MOUNTING HEIGHT
- (BF) BARRIER FREE ADULT MOUNTING HEIGHT
- FINISH FLOOR LINE

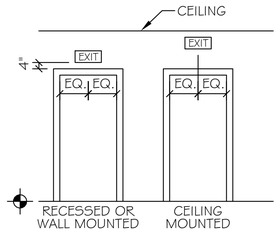
NOTE

MOUNT ALL FIXTURES AT STANDARD MOUNTING HEIGHT UNLESS INDICATED ON PLAN BY A ♿ SYMBOL. A ♿ SYMBOL AT ANY ROOM SHALL INCLUDE ONE OF ANY FIXTURE AND ACCESSORY WITHIN THE ROOM.



ELECTRICAL & FIRE PROTECTION DEVICES (TYPICAL U.O.N.)

NTS

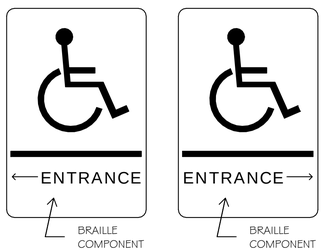


EXIT SIGNS
(TYPICAL UNLESS OTHERWISE NOTED)

NTS

ACCESSIBILITY GENERAL NOTES

1. DOORWAYS SHALL HAVE A MINIMUM CLEAR WIDTH OF 32" WITH THE DOOR OPEN 90 DEGREES. MEASURED BETWEEN THE FACE OF THE DOOR AND THE OPPOSITE STOP.
2. ALL DOORS SHALL HAVE LEVER HANDLE HARDWARE, EXCEPT AT SECURED STORAGE ROOMS, MECHANICAL ROOMS, AND ELEVATOR MACHINE ROOMS,
3. ALL CLOSERS SHALL BE 5LB PULL MAXIMUM AT DOORS EQUIPPED WITH LEVER HANDLE HARDWARE.
4. ALL DOORS WITH CLOSERS SHALL HAVE 18" CLEAR DISTANCE FROM THE LATCHSIDE OF THE OPENING TO ANY ADJACENT WALL OR OBSTRUCTION ON THE PULL SIDE OF THE OPENING.
5. ALL DOORS WITH CLOSERS SHALL HAVE 12" CLEAR DISTANCE FROM THE LATCHSIDE OF THE OPENING TO ANY ADJACENT WALL OR OBSTRUCTION ON THE PUSH SIDE OF THE OPENING.
6. ALL SIGNAGE SHALL BE MOUNTED 60" AFF TO BRAILLE COMPONENT AT LATCH-SIDE WALL OF DOORS AND OPENINGS.
7. COMPLY WITH 2010 EDITION OF THE AMERICANS WITH DISABILITIES ACT.



SIGN Ⓐ

SIGN Ⓑ

Scale: 12" = 1'-0"			
No.	Revision	By	Date

Designed by: MICHAEL F. HAYS, RA
ISSUED FOR BID

LICENSED ARCHITECT MICHAEL F. HAYS No. 1724 STATE OF MAINE

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

ACCESSIBILITY DETAILS & NOTES

SHEET NUMBER: A-8

CONTRACT: 2022.08

SPECIAL INSPECTIONS

1. SPECIAL INSPECTIONS: AN INDEPENDENT INSPECTIONS PROGRAM AND SCHEDULE SHALL BE INCLUDED.

2. A QUALIFIED PERSON APPROVED BY THE BUILDING OFFICIALS SHALL MAKE SPECIAL INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE IBC-2015, AND AS DEFINED. SPECIAL INSPECTOR SHALL OBSERVE WORK FOR CONFORMANCE WITH THE APPROVED DRAWINGS AND SPECIFICATIONS.

3. INSPECTION REPORTS SHALL BE FURNISHED TO THE OWNER, BUILDING OFFICIAL, ARCHITECT AND SER. DISCREPENCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR AND IF NOT CORRECTED, SHALL BE REPORTED TO THE OWNER, BUILDING OFFICIAL, ARCHITECT AND SER.

4. THE FOLLOWING TYPES OF WORK SHALL RECEIVE SPECIAL INSPECTION OVERSITE: STRUCTURAL STEEL FABRICATION, ERECTION AND CONNECTIONS, METAL DECK FASTENING, INSTALLATION OF REINFORCING STEEL FOR CONCRETE, ALL CONCRETE PLACEMENT AND STRENGTH TESTING, AND STRUCTURAL FILL PLACEMENT.

FIELD TESTING

1. BOLTED CONNECTIONS: 100% OF COMPONENTS AND FASTENERS IN SLIP CRITICAL CONNECTIONS, AS IDENTIFIED IN THE PROJECT CONTRACT DOCUMENTS, SHALL BE VISUALLY INSPECTED AND TESTED FOR TIGHTNESS IN ACCORDANCE WITH AISC SPECIFICATIONS FOR STRUCTURAL JOINTS, PARTS 8 AND 9.

2. CHECK BY CALIBRATION TORQUE WRENCH: 25% OF BOLTS IN EACH NON-SC SHEAR CONNECTION, BUT NOT LESS THAN (2) PER CONNECTION.

3. FIELD-WELDED CONNECTIONS: PERFORM TESTING IN ACCORDANCE WITH ANSI/AWS D1.1, CHAPTER 6.

4. CONDUCT TESTING OF 10% OF WELDS ON STRUCTURAL STEEL BY DYE PENETRATION OR MAGNETIC PARTICLE TESTING.

5. CONDUCT TESTING OF 100% OF GROOVE, PLUG, OR SLOT WELDS IN STRUCTURAL STEEL BY ULTRASONIC TESTING OR OTHER NONDESTRUCTIVE TESTING, APPROVED BY ENGINEER OF RECORD.

6. RADIOGRAPHICALLY TEST 5% OF ALL FULL-PENETRATION WELDS.

7. WELDED SHEAR STUDS: 10% OF STUDS SHALL BE TESTED BY BENDING OR TORQUEING IN ACCORDANCE WITH ANSI/AWS D1.1 SECTION 7.8.

8. THE STRUCTURAL FABRICATOR AND ERECTOR SHALL SCHEDULE ALL WORK TO ALLOW THE ABOVE INSPECTION AND TESTING REQUIREMENTS TO BE COMPLETED.

ROOF TIE-OFF ANCHOR NOTES:

1. PEMB DESIGN SHALL INCLUDE DESIGN CALCULATION AND ALL SUPPLEMENTAL STRUCTURAL FRAMING INTEGRAL WITH THE PEMB DESIGN AT THESE LOCATIONS. SYSTEM SHALL BE DESIGNED FOR A 5,000 # HORIZONTAL LOADING APPLIED IN ANY DIRECTION AT THE TOP OF THE TIE-OFF ANCHORAGE SYSTEM

2. PROVIDE GUARDIAN FALL PROTECTION CB-18 ROOF ANCHORS (OR EQUAL) DIRECT CONNECTED TO PRE-ENGINEERED BUILDING ROOF

CONCRETE:

1. CONCRETE WORK SHALL COMPLY WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE BUILDINGS"; ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"; AND ACI 315 "ACI DETAIL MANUAL", AND CRSI "MANUAL OF STANDARD PRACTICE".

2. CONTRACTOR SHALL PROVIDE TIES AND BRACING WHERE NECESSARY DURING CONSTRUCTION, TO REMAIN IN PLACE UNTIL THE STRUCTURE(S) IS/ARE COMPLETE.

3. CONCRETE SHALL BE:
   - A. FOOTINGS, PIERS AND FOUNDATION WALLS: 3,500 PSI AT (28) DAYS. SLUMP SHALL NOT EXCEED 6 INCHES (W/C RANGE: 0.48 – 0.52) – (AIR ENTRAINED).
   - B. INTERIOR SLABS-ON-GRADE: (NO AIR)
     - a. MAINTENANCE AREA - 4,000 PSI CONCRETE AT (28) DAYS. SLUMP SHALL NOT EXCEED 6 INCHES (W/C RANGE: 0.47 – 0.50).
     - b. OFFICE AREAS - 3,500 PSI CONCRETE AT (28) DAYS. SLUMP SHALL NOT EXCEED 6-INCHES (W/C RANGE: 0.47 – 0.50).
   - C. EXTERIOR SLABS ON GRADE SIDEWALKS, AND STAIRS SHALL BE 4000 PSI AT (28) DAYS. SLUMP SHALL NOT EXCEED 6-INCHES (W/C = 0.45 – 0.47) – (AIR ENTRAINED).

4. CONCRETE MATERIALS:
   - A. PORTLAND CEMENT: ASTM C150, TYPE I OR II. USE ONE TYPE THROUGHOUT PROJECT.
   - B. NORMAL WEIGHT AGGREGATES: ASTM C33. PROVIDE FROM SINGLE SOURCE FOR ENTIRE PROJECT. NO AGGREGATE CONTAINING SOLUBALE SALTS, IRON SULFIDES, PYRITE, MARCASITE, OR OCHRE WHICH CAN CAUSE STAINS ON EXPOSED CONCRETE SURFACES.
   - C. LIGHTWEIGHT AGGREGATES: ASTM C330
   - D. WATER: POTABLE
   - E. AIR-ENTRAINING ADMIXTURE: ASTM C260
   - F. HIGH RANGE WATER REDUCING ADMIXTURES (SUPER PLASTICIZER): ASTM C494, TYPE F OR G CONTAINING NOT MORE THAN 1% CHLORIDE IONS.
   - G. NORMAL RANGE WATER REDUCING ADMIXTURES: ASTM C494 TYPE A CONTAINING NO CALCIUM CHLORIDE.
   - H. ACCELERATING ADMIXTURES: ASTM C494, TYPE C OR E.

5. PROVIDE METAL OR CONCRETE SLEEVES WHERE PIPES PASS THROUGH CONCRETE WALLS OR SLABS.

6. REINFORCING BARS IN WALLS AND FOOTINGS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS, AND SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH ACI 315-LATEST EDITION.

7. REINFORCING BARS FOR INTERIOR SLABS-ON-GRADE SHALL CONFORM TO ASTM A775 GRADE 60 EPOXY COATED BARS, AND SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH ACI 315-LATEST EDITION. DAMAGE IN SURFACE COATING SHALL BE LIMITED TO LESS THAN 2 PERCENT DAMAGED COATING IN EACH 12-INCH BAR LENGTH

8. COMPLETE SHOP DRAWINGS AND SCHEDULES OF ALL REINFORCING STEEL SHALL BE PREPARED BY CONTRACTOR AND SUBMITTED TO THE OWNER, FOR REVIEW BY EOR PRIOR TO COMMENCEMENT OF THAT PORTION OF THE WORK. ALL ACCESSORIES MUST BE SHOWN ON THE SHOP DRAWINGS.

9. WELDING OF REINFORCEMENT IS NOT PERMITTED.

10. CONSTRUCTION JOINTS FOR SLABS SHALL BE KEY JOINTED AT MID-SPAN WITH REINFORCING DISCONTINUOUS AT JOINT AND FILLED WITH AN APPROPRIATE SEALANT FOR THE INTENDED USE.

11. CONTRACTOR WILL CHECK WITH EACH TRADE TO ASSURE CORRECT LOCATION, SIZE, LINE AND ELEVATION OF SLEEVES, BOND-OUTS, ETC. REQUIRED IN CONCRETE FLOORS AND WALLS.

12. CONTRACTOR SHALL BE RESPONSIBLE FOR FLOOR DRAIN SETTING AND EXTENTS OF AREA SLOPE TO DRAIN DEVELOPMENT. VERIFY WITH ARCHITECTURAL AND PLUMBING PLANS TO ENSURE COMPLETE AREA DRAINAGE PLAN MATCHES THE DESIGN INTENT.

13. MECHANICAL EQUIPMENT RESTING ON THE CONCRETE FLOOR SLAB SHALL HAVE A 4-INCH HIGH CONCRETE PAD UNDERNEATH; EXTENDING A MINIMUM OF 6-INCHES BEYOND UNIT EDGE (EACH DIRECTION), REINFORCED WITH #3 BARS AT 18-INCHES ON-CENTER, EACH WAY.

14. ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED. CONCRETE SHALL NOT BE IN DIRECT CONTACT WITH ALUMINUM.

15. PROVIDE IN SLABS-ON-GRADE: (2) #4 EPOXY COATED BARS, 4'-0" LONG, AT EACH REENTRANT CORNER AND BOTH SIDES OF EACH DOOR OPENING.

16. COORDINATE SLAB DEPRESSIONS AND ALL INTERIOR FLOOR SLOPES TO DRAIN LOCATIONS WITH ARCHITECTURAL DRAWINGS.

17. SLAB THICKNESSES (ON-GRADE) INDICATED ON THE DRAWINGS ARE MINIMUMS. PROVIDE SUFFICIENT CONCRETE TO ACCOUNT FOR SUBGRADE FLUCTUATIONS IN ORDER TO OBTAIN SPECIFIED SLAB ELEVATIONS AND SLOPES TO FLOOR DRAINS/TRENCHES. FLATNESS AND LEVELNESS INDICATED IN THE SPECIFICATION.

18. ANCHOR BOLTS SHALL CONFORM TO ASTM A1554 – GRADE 36 UNLESS NOTED OTHERWISE ON PLAN.

STRUCTURAL NOTES:

MINIMUM LOADING REQUIREMENTS:

1. DESIGN CODES:
   - A. INTERNATIONAL BUILDING CODE – 2015 EDITION
   - B. ASCE/SEI 7-10 - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
   - C. AISC SEISMIC DESIGN MANUAL – 2012
   - D. MBMA'S METAL BUILDING SYSTEMS MANUAL

2. DESIGN PARAMETERS:

   A. ROOF SNOW LOADS: (EXCEPT AT DRIFTING SNOW LOCATIONS AND THOSE LISTED BELOW. PEMB EOR TO DETERMINE WHERE DRIFTING SNOW MAY APPLY.)

a.	GROUND SNOW LOAD:	P_G =	60.0 PSF
1.	IMPORTANCE FACTOR:	I_s =	1.20 (CATEGORY IV)
2.	COLD ROOF SLOPE FACTOR:	C_s =	1.0
3.	THERMAL FACTOR:	C_t =	1.10
4.	EXPOSURE FACTOR:	C_e=	1.0
5.	TERRAIN CATEGORY:		"B"
b.	FLAT ROOF SNOW LOAD:	P_f =	55.4 PSF

   B. ROOF DEAD LOAD: 20 PSF (INCL. 8.0 PSF, FOR FUTURE SOLAR ARRAY)

   C. ROOF LIVE LOAD:
   - a. STANDARD ROOF LIVE LOAD: 20 PSF

   D. FLOOR LIVE LOADS:
   - a. OFFICE BUILDINGS
     1. VEHICLE MAINTENANCE FLOOR – DESIGN FOR TRUCKS AND BUSES PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS; HOWEVER, PROVISIONS FOR FATIGUE AND DYNAMIC LOAD ALLOWANCE HAVE NOT BEEN APPLIED.

   E. WIND:

a.	FACTORS:	
1.	ASCE-7-10	V_{ult} = 127 MPH
2.	EXPOSURE CATEGORY:	B
3.	BUILDING HEIGHT:	<30'

   F. SEISMIC:

a.	DESIGN DATA:	
1.	BUILDING RISK CATEGORY:	IV – ESSENTIAL FACILITY
2.	MAPPED RESPONSE SPECTRAL ACC. (0.2 SEC.):	S_S = 0.232G
3.	MAPPED RESPONSE SPECTRAL ACC. (1.0 SEC.):	S_1 = 0.079G
4.	SOIL SITE CLASSIFICATION:	D
5.	DESIGN RESPONSE SPECTRAL ACC. @ 5% DAMPED DESIGN:	S_{DS} = 0.247G S_{D1} = 0.126G
6.	SEISMIC DESIGN CATEGORY:	C
7.	BASIC SEISMIC FORCE-RESISTING SYSTEM:	H1 (SEE BELOW)
8.	SEISMIC BASE SHEAR:	21.8 KIPS
9.	SEISMIC RESPONSE COEFFICIENT	C_S = 0.124
10.	ANALYSIS PROCEDURE:	EQUIVALENT LATERAL FORCE PROCEDURE

   b. DESIGN COEFFICIENTS AND FACTORS FOR SEISMIC FORCE RESISTING SYSTEMS

1.	STEEL SYSTEMS NOTE SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE	
A.	RESPONSE MODIFICATION	R = 3
B.	SYSTEM OVERSTRENGTH FACTOR	Ω_0 = 3
C.	DEFLECTION AMPLIFICATION FACTOR	C_D = 3

GENERAL NOTES:

1. CONTRACTOR SHALL CONFORM TO SAFETY REQUIREMENTS OF THE OWNER, CONTRACT DOCUMENTS, OSHA SAFETY AND HEALTH STANDARDS, AND OTHER LOCAL AUTHORITIES IN CONNECTION WITH THE PERFORMANCE OF THIS PROJECT.

2. ALL REFERENCED STANDARDS OR PUBLICATIONS SHALL PERTAIN TO THE MOST CURRENT DATA, STANDARD OR PUBLICATION, UNLESS NOTED OTHERWISE.

3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND CIVIL DRAWINGS AND/OR NARRATIVES, WHICH DESCRIBE THE SCOPE OF WORK.

4. CONTRACTOR SHALL VISIT THE SITE AT A DESIGNATED TIME APPROVED BY THE OWNER, TO VERIFY EXISTING CONDITIONS, DIMENSIONS, LOCATION OF EXISTING UTILITIES, ETC. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES, WITHOUT EXCEPTION.

5. THE STRUCTURE SHALL BE DESIGNED AS A SELF-SUPPORTING SYSTEM ONCE ALL WORK HAS BEEN COMPLETED. CONTRACTOR IS SOLELY RESPONSIBLE FOR ERECTION PROCEDURES AND SEQUENCE OF INSTALLATION TO ENSURE SAFETY OF THE BUILDING AND ITS OCCUPANTS DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS AND TEMPORARY SHORING, PRECAUTIONS DURING BUILDING OPERATIONS, PROTECTION OF PUBLIC AND WORKERS, REMOVAL OF WASTE MATERIAL, PROTECTION OF ADJACENT PROPERTY, PROTECTION OF HAZARDOUS OPENINGS, SAFETY PRECAUTIONS, AND SANITARY PROVISIONS OF EMPLOYEES AND SUB-CONTRACTORS, AS REQUIRED, FOR THE DURATION OF THE CONTRACT.

6. WORK SHALL BE DONE IN AN ORDERLY AND PROFESSIONAL MANNER. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL WORK TO BE DONE BY SUB-CONTRACTORS, LOCAL AUTHORITIES, STATE AGENCIES AND/OR UTILITY COMPANIES WHICH MAY HAVE JURISDICTION OVER THIS PROJECT.

7. UTILITY EXTENSIONS AND CONNECTIONS SHALL BE IN ACCORDANCE WITH STATE AND LOCAL CODES.

8. CONTRACTOR SHALL REVIEW AND SUBMIT COMPLETE SHOP DRAWINGS FOR ALL SPECIFIED PARTS OF THE WORK. NO PORTION OF THE WORK COVERED BY THESE SHOP DRAWINGS SHALL COMMENCE UNTIL RETURNED APPROVED SHOPS ARE RECEIVED BY CONTRACTOR. SHOP SUBMITTAL PACKAGES SHALL INCLUDE, BUT NOT BE LIMITED TO:
   - A. SITE: SHORING AND CONSTRUCTION METHODS/SEQUENCING, WHERE APPLICABLE.
   - B. CONCRETE: MIX DESIGNS, ADMIXTURES, MIX HISTORIES; REBAR ORIGIN STRENGTH/GRADE; REBAR PLACEMENT DRAWINGS.
   - C. COLD-FORMED METAL FRAMING: COLD-FORMED METAL CUT SHEETS, CONNECTIONS, PLACEMENT DRAWINGS ALONG WITH HEADER/JAMB AT OPENINGS AND FRAMING ELEMENT CALCULATIONS SIGNED BY A PE, REGISTERED IN THE PROJECT STATE.
   - D. PRE-ENGINEERED BUILDING: PRE-ENGINEERED BUILDING CALCULATIONS AND DRAWINGS, STEEL FRAMING COMPONENTS AND CONNECTIONS, ALL SEALED BY A PE REGISTERED IN THE PROJECT STATE.
   - E. STRUCTURAL STEEL: MISCELLANEOUS STEEL FRAMING COMPONENT SHOP DRAWINGS, ALONG WITH APPLICABLE FRAMING COMPONENT AND CONNECTION CALCULATIONS, ALL SEALED BY A PE REGISTERED IN THE PROJECT STATE.

9. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY EXISTING ITEMS DAMAGED BY NEW CONSTRUCTION, AND FOR ANY INCIDENTAL REPAIRS OF EXISTING FINISHED SURFACES DISTURBED BY NEW CONSTRUCTION; SUCH REPAIRS SHALL MATCH EXISTING TO THE OWNER'S SATISFACTION.

10. CONTRACTOR IS RESPONSIBLE FOR COORDINATING, HANDLING, AND STORAGE OF ITEMS/MATERIALS TO REMAIN THE PROPERTY OF THE OWNER WITH THE OWNER'S REPRESENTATIVE.

11. SPECIAL INSPECTIONS, AS REQUIRED BY IBC 2015 SECTION 1704, SHALL BE PERFORMED BY AN INSPECTION AGENCY CONTRACTED BY THE OWNER FOR THE FOLLOWING ELEMENTS:
    1. CONCRETE/FOUNDATIONS: REBAR PLACEMENTS FOR CONFORMANCE WITH CONTRACT DOCUMENTS, CONCRETE DELIVERY TICKET MIX CONFIRMATION, VOLUME TEST SAMPLES FOR CONCRETE PLACEMENTS WITH 7, 14, AND 28 DAY BREAK TEST RESULTS.
    2. SOILS: COMPACTION TESTING AND GRADATION CONFIRMATION
    3. STEEL INCLUDING PEMB BUILDING FRAMING: STEEL PLACEMENTS FOR CONFORMANCE WITH CONTRACT DOCUMENTS, 100% OF BOLTED CONNECTIONS TESTING, 10% OF FIELD WELDED CONNECTIONS.

FOUNDATION NOTES:

1. THE SITE SHALL BE PREPARED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT "EXPLORATIONS AND GEOTECHNICAL ENGINEERING SERVICES PROJECT 8-BAY MAINTENANCE GARAGE, MAINE TURNPIKE AUTHORITY LITCHFIELD MAINTENANCE YARD, LITCHFIELD, MAINE, PREPARED BY S.W. COLE ENGINEERING, INC. DATED 02-10-2022. NET ALLOWABLE BEARING USED FOR DESIGN IS 3.5 KSF PER REPORT REFERENCED ABOVE. BEARING PRESSURE SHALL BE VERIFIED BY THE OWNER'S TESTING AGENCY PRIOR TO PLACING FOOTING CONCRETE.

2. EXTERIOR STRIP AND SPREAD FOOTINGS SHALL HAVE MINIMUM 5'-0" GRADE COVER TO BOTTOM OF FOOTING ELEVATIONS.

3. 10 MIL VAPOR BARRIER REQUIREMENTS BENEATH SLABS THROUGHOUT.

4. UNDERDRAINS SHALL BE PLACED AS SHOWN ON THE SITE DRAWINGS. UNDERDRAINS SHALL BE INSTALLED TO POSITIVELY DRAIN TO A SUITABLE DISCHARGE POINT AWAY FROM THE STRUCTURE. REFER TO SITE DRAWINGS FOR ADDITIONAL INFORMATION.

5. EXCAVATIONS FOR BUILDING FOUNDATIONS AND STRUCTURES SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS. BRACED EXCAVATIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROJECT STATE. DO NOT UNDERMINE EXISTING ADJACENT FOUNDATIONS.

6. IN NO CASE SHALL HEAVY EQUIPMENT BE PERMITTED CLOSER THAN 8'-0" FROM ANY FOUNDATION/BASEMENT WALL. IF THE CONTRACTOR DEEMS IT NECESSARY TO OPERATE SUCH EQUIPMENT CLOSER THAN 8'-0", THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND, AT HIS OWN EXPENSE, PROVIDE ADEQUATE SUPPORTS OR WALL BRACES TO WITHSTAND THE ADDITIONAL LOADS SUPERIMPOSED FROM SUCH EQUIPMENT.

7. CONCRETE SHALL NOT BE PLACED ON FROZEN GROUND OR IN WATER.

Scale:

No.	Revision	By	Date

Designed by:

WILLIAM P. FAUCHER, P.E.

ISSUED FOR BID

STATE OF MAINE — WILLIAM P. FAUCHER — No. 7133 — LICENSED PROFESSIONAL ENGINEER

	By	Date		By	Date
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Allied Engineering
Structural Mechanical Electrical Plumbing
160 Veranda Street
Portland, Maine 04103
P: 207.221.2260
F: 207.221.2266
Web:www.allied-eng.com

AEI PROJ.NO.: 21116 | CAD FILE: 20019S_R20.rvt

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

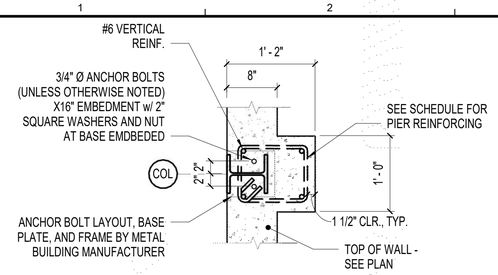
MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

STRUCTURAL - GENERAL INFORMATION

SHEET NUMBER: S-000

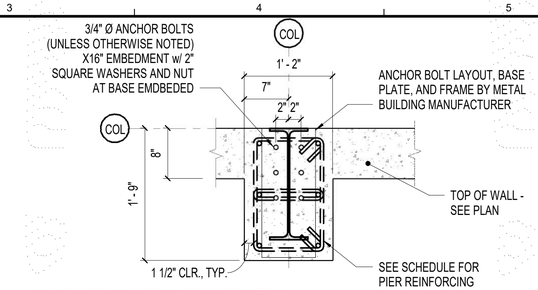
CONTRACT: 2022.08



ANCHOR BOLT LAYOUT SHALL BE COORDINATED w/ METAL BUILDING MANUFACTURER PRIOR TO INSTALLATION OF ANCHOR BOLTS. MANUFACTURER SHALL PROVIDE ANCHOR BOLT DETAIL OR SCHEDULE.

E1 — PIER DETAIL ~ END WALL COLUMNS

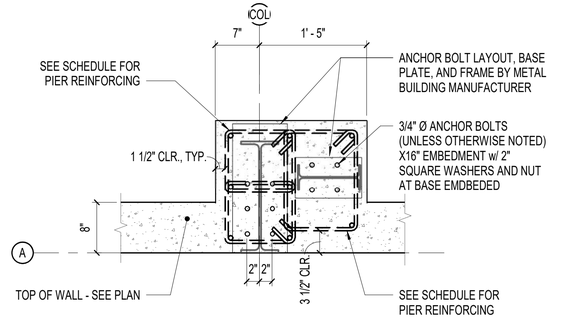
1" = 1'-0"



ANCHOR BOLT LAYOUT SHALL BE COORDINATED w/ METAL BUILDING MANUFACTURER PRIOR TO INSTALLATION OF ANCHOR BOLTS. MANUFACTURER SHALL PROVIDE ANCHOR BOLT DETAIL OR SCHEDULE.

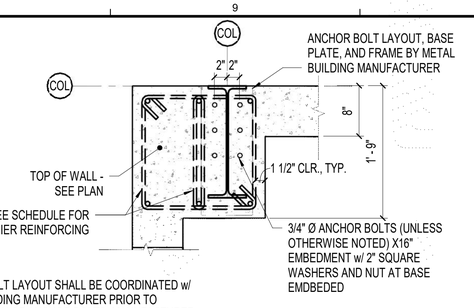
E3 — PIER DETAIL ~ MAIN FRAME COLUMNS

1" = 1'-0"



E6 — PIER DETAIL ~ PORTAL FRAME

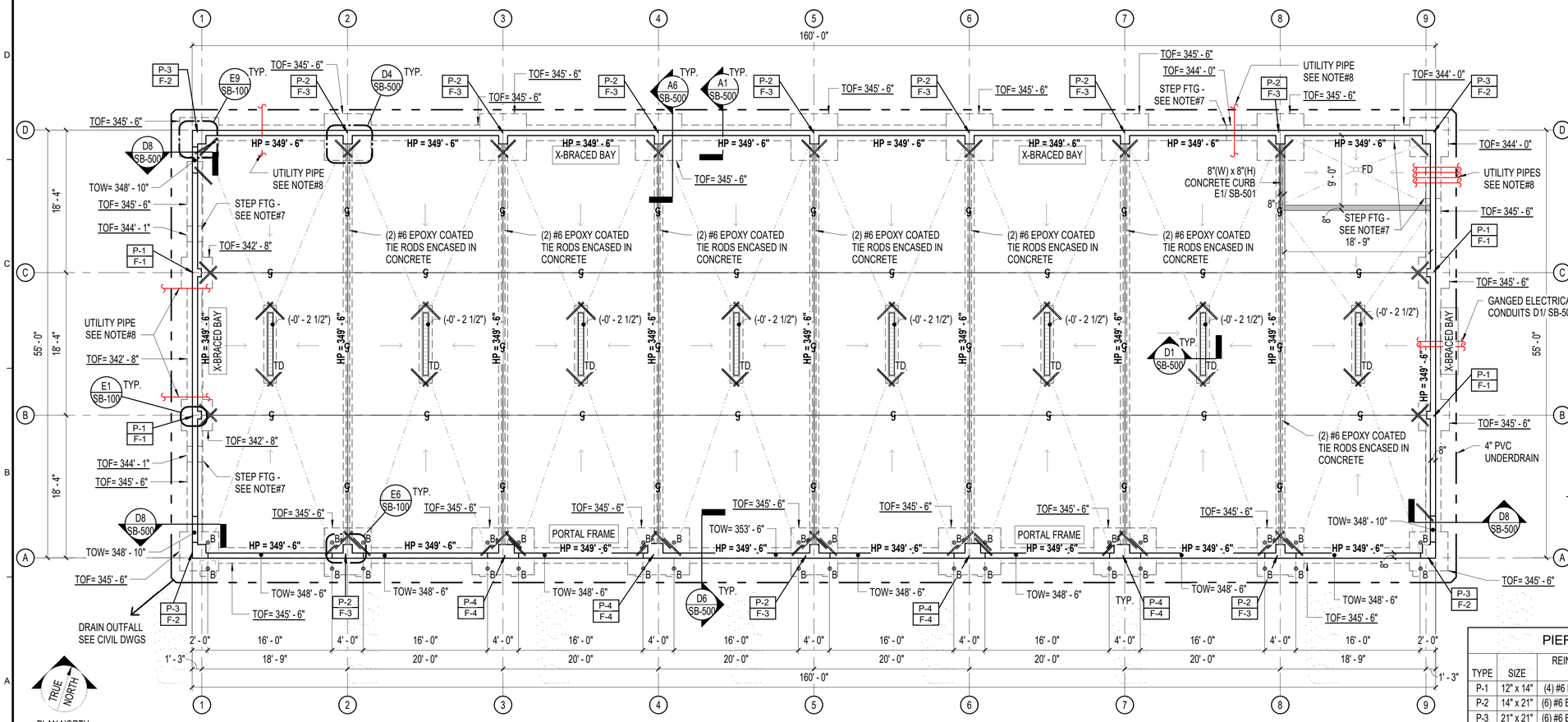
1" = 1'-0"



ANCHOR BOLT LAYOUT SHALL BE COORDINATED w/ METAL BUILDING MANUFACTURER PRIOR TO INSTALLATION OF ANCHOR BOLTS. MANUFACTURER SHALL PROVIDE ANCHOR BOLT DETAIL OR SCHEDULE.

E9 — PIER DETAIL ~ CORNER COLUMNS

1" = 1'-0"



FOUNDATION PLAN NOTES:

1. FINISH SLAB ELEVATION = 349.50' (349' - 6")
2. CONCRETE SLAB-ON-GRADE SHALL BE 6" MINIMUM THICKNESS REINFORCED WITH #5 EPOXY COATED BARS AT 12-INCHES ON-CENTER EACH WAY UNLESS NOTED OTHERWISE. SLOPE SLAB TOWARD DRAINS INDICATED ON PLAN, MAINTAIN SLAB DEPTH. REINFORCING FOR 6" INTERIOR SLAB SHALL BE SET ON BOLSTER 2" ABOVE VAPOR BARRIER.
3. TOP OF WALL ELEVATION = 353'-6" UNLESS NOTED OTHERWISE.
4. TOP OF PIER ELEVATION = 353'-6" UNLESS NOTED OTHERWISE.
5. HP = HIGH POINT NOTED AS ELEVATION (349'-6") ON PLAN IS EQUAL TO FINISHED SLAB ELEVATION. DRAIN AND SLOPE LINE ELEVATIONS NOTED (+/- X'-X") FROM HIGH POINT.
6. G.C. SHALL COORDINATE TOP OF FOOTING ELEVATIONS NOTED ON PLAN FOR EXTERIOR WALL STRIP FOOTINGS AND FOR FOOTINGS BELOW PIER PIERS ALONG EXTERIOR WALL.
   A. TOP OF FOOTINGS SHALL BE SET A MINIMUM OF 4'-0" BELOW FINISHED GRADE PER GEOTECHNICAL REPORT REFERENCED IN "FOUNDATION, NOTE#1" ON SHEET S-000
   B. TOP OF FOOTING ELEVATIONS NOTED WERE BASED ON SHEET C-103 DATED 02/17/2022.
7. STEP FOOTING AS REQUIRED - G.C. SHALL COORDINATE LOCATION AND QUANTITY OF STEPS
8. G.C. SHALL COORDINATE UTILITY ENTRANCES WITH CIVIL / PLUMBING / ELECTRICAL DRAWINGS FOR OCCURANCES, LOCATIONS, SIZES AND ELEVATIONS. LOCATIONS NOTED ON THIS DRAWING ARE APPROXIMATE. REFER TO DETAIL A1/SB-501, STEP FOOTINGS AS REQUIRED.

F-# INDICATES FOOTING TYPE - SEE SB-100 FOR SCHEDULE.

P-# INDICATES CONCRETE PIER TYPE - SEE SB-100 FOR SCHEDULE

B INDICATES BUILDING BOLLARD (PROVIDE AT EACH OVERHEAD DOOR AS SHOWN ON PLAN) SET BOLLARD ON A MIN. 2'-0" SQUARE x 12" THICK FOOTING - REFER TO TYPICAL BUILDING BOLLARD DETAIL (A4/SB-501)

INDICATES CONTROL JOINT IN SLAB - SEE DETAIL F4/SB-501

TD INDICATES TRENCH DRAIN - COORDINATE w/PLUMBING DRAWINGS

INDICATES RE-ENTRANT BAR PER CONCRETE NOTE#15 SHEET S-000

DIMENSIONAL LAYOUT / FOUNDATIONS / PIER SIZES ARE PRELIMINARY. FINAL DIMENSIONS / FOUNDATIONS / PIER SIZES SHALL BE DETERMINED UPON RECEIPT AND APPROVAL OF FINAL PRE-ENGINEERED METAL BUILDING (PEMB) SHOP DRAWING SUBMITTAL PACKAGE INCLUDING MEMBER SIZES AND REACTIONS.

PIER SCHEDULE

TYPE	SIZE	REINFORCING (GRADE 60, DEFORMED BARS)
P-1	12" x 14"	(4) #6 BARS VERTICAL; #4 HORIZ. TIES @ 8"
P-2	14" x 21"	(6) #6 BARS VERTICAL; #4 HORIZ. TIES @ 12"
P-3	21" x 21"	(6) #6 BARS VERTICAL; #4 HORIZ. TIES @ 12"
P-4	21" x 24"	(8) #6 BARS VERTICAL; #4 HORIZ. TIES @ 12"

FOOTING SCHEDULE

MARK	SIZE	REINFORCING (GRADE 60, DEFORMED BARS)
F-1	48" x 48" x 12"	(9) #4 BARS E.W. BOTTOM
F-2	60" x 60" x 13"	(7) #5 BARS E.W. BOTTOM
F-3	72" x 72" x 16"	(7) #5 BARS E.W. BOTTOM
F-4	96" x 72" x 16"	(7) #5 BARS E.W. BOTTOM

A1 — STRUCTURAL ~ FOUNDATION PLAN

1/8" = 1'-0"

Scale: As indicated

No.	Revision	By	Date

Designed by: WILLIAM P. FAUCHER, P.E.

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Structural Mechanical Electrical Plumbing
160 Veranda Street
Portland, Maine 04103
P: 207.221.2260
F: 207.221.2266
Web:www.allied-eng.com

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

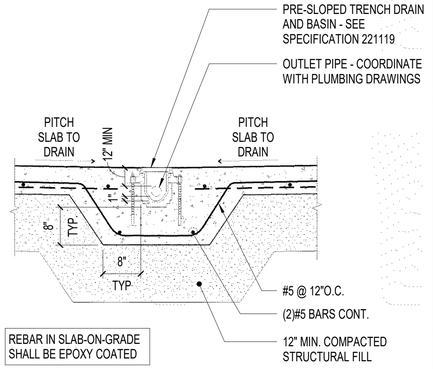
MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

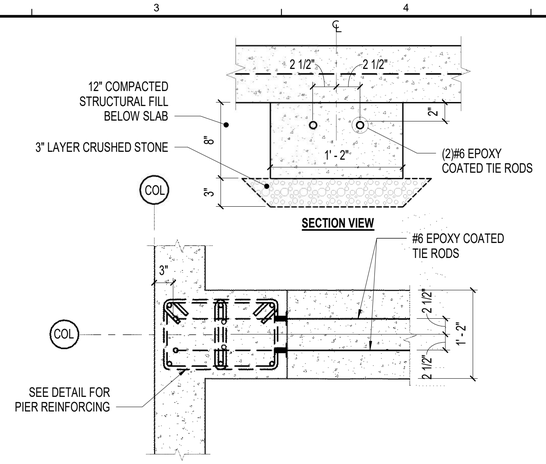
STRUCTURAL - FOUNDATION PLAN

SHEET NUMBER: SB-100

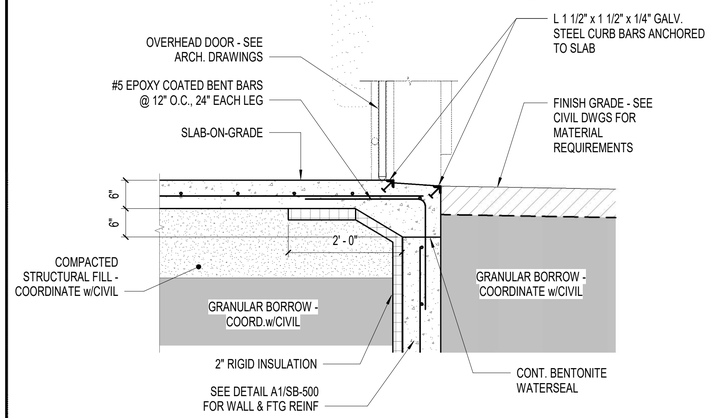
CONTRACT: 2022.08



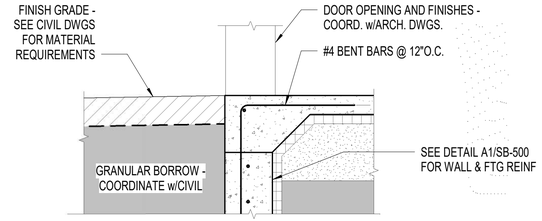
D1	DETAIL AT TRENCH DRAIN
3/4" = 1'-0"	



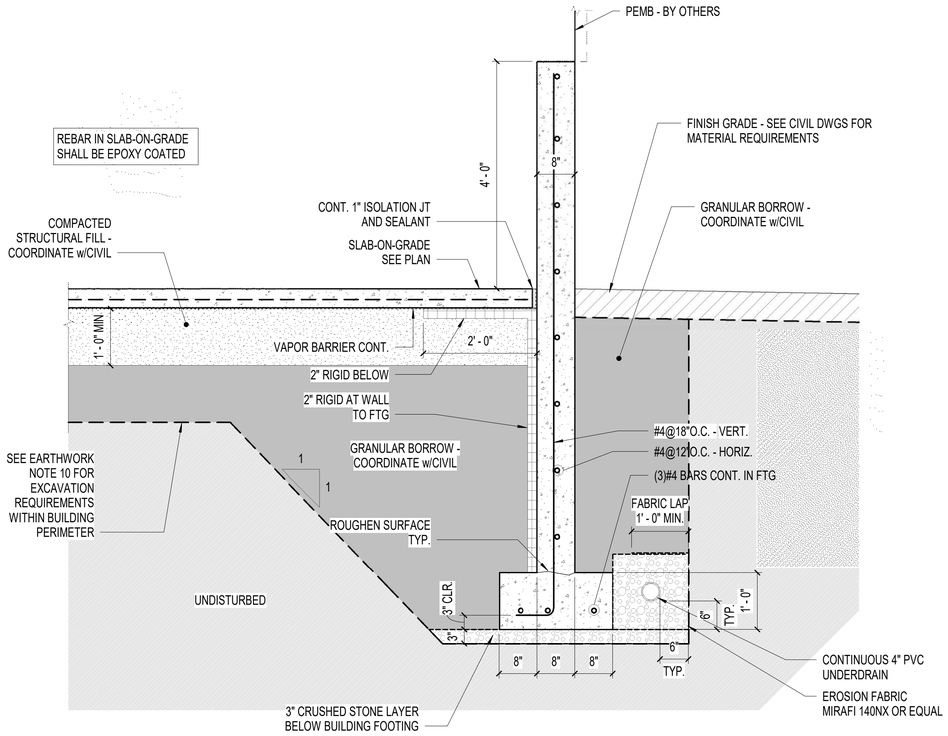
D4	TIE ROD DETAIL
1" = 1'-0"	



D6	TYPICAL AT OHD ENTRY
3/4" = 1'-0"	



D8	TYPICAL SLAB ENTRY DETAIL
3/4" = 1'-0"	

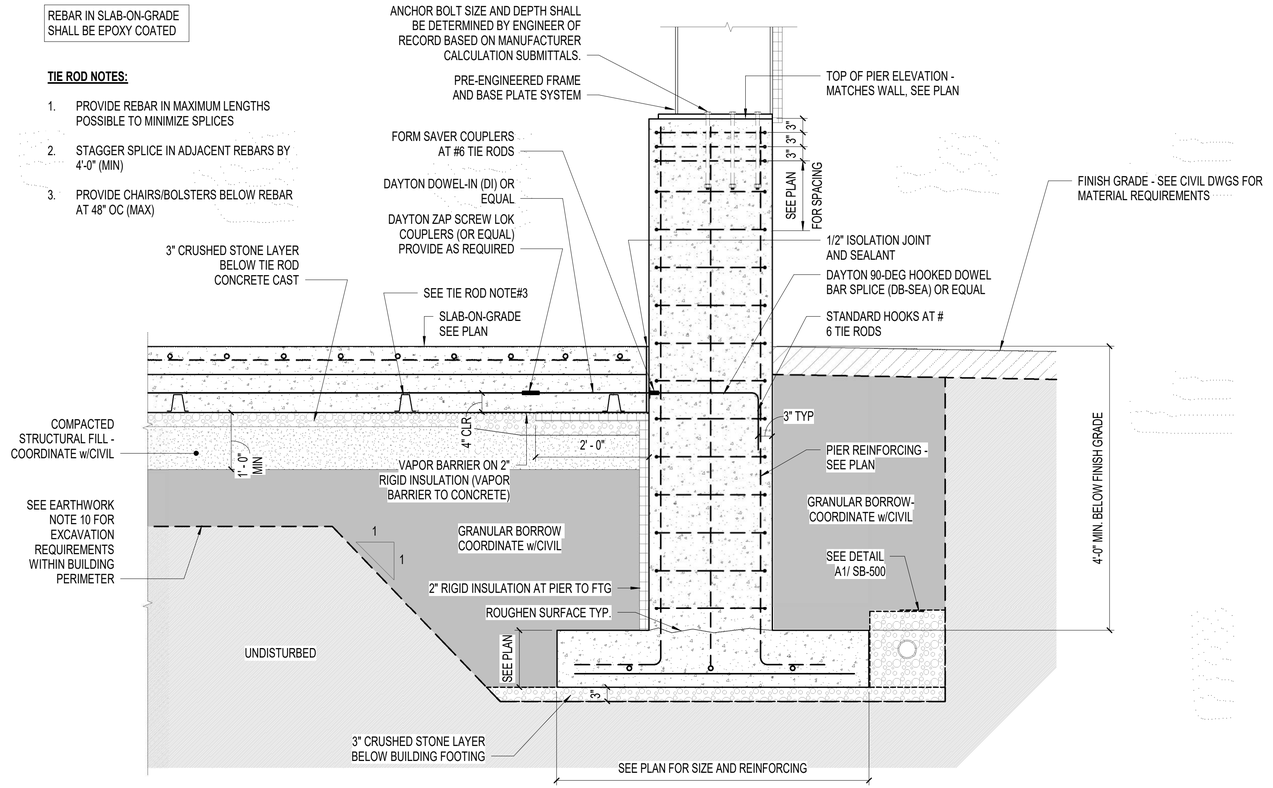


A1	TYPICAL 8" FDN WALL
3/4" = 1'-0"	

REBAR IN SLAB-ON-GRADE SHALL BE EPOXY COATED

TIE ROD NOTES:

1. PROVIDE REBAR IN MAXIMUM LENGTHS POSSIBLE TO MINIMIZE SPLICES
2. STAGGER SPLICE IN ADJACENT REBARS BY 4'-0" (MIN)
3. PROVIDE CHAIRS/BOLSTERS BELOW REBAR AT 48" OC (MAX)



A6	TYPICAL EXTERIOR PIER DETAIL
3/4" = 1'-0"	

Scale:

As indicated

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

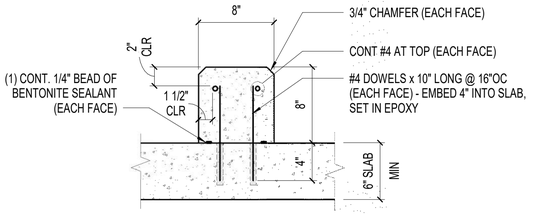
MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

STRUCTURAL - FOUNDATION DETAILS

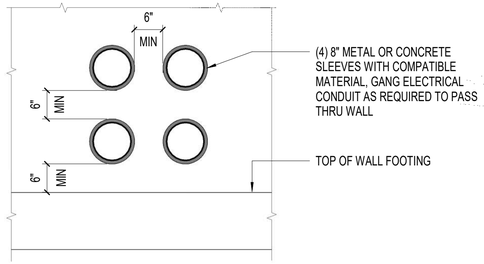
SHEET NUMBER: SB-500

CONTRACT: 2022.08



NOTE: WHERE CURB TERMINATES AT BUILDING WALL/PIER - CONTINUE (1) 1/4" BEAD OF BENTONITE SEALANT (EACH FACE) BETWEEN VERTICAL FACE OF BUILDING WALL/PIER AND CURB

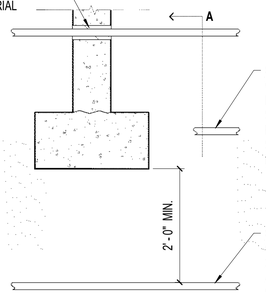
E1	CURB DETAIL
1 1/2" = 1'-0"	



D1	MULTI-GANGED ELECTRICAL CONDUIT THRU FDN WALL
3/4" = 1'-0"	

DETAIL - A

CONDITION - 1:
WHERE PIPE ELEVATION IS ABOVE FOOTING, SLEEVE PIPE THROUGH WALL - USE METAL OR CONCRETE SLEEVE WITH COMPATIBLE MATERIAL

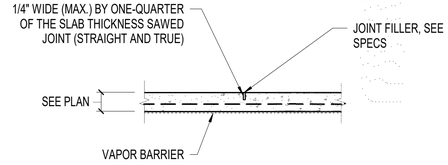


CONDITION - 2:
WHERE PIPE ELEVATION IS AT FOOTING TO 24" BELOW, STEP FOOTING TO CLEAR PIPE (SEE DETAIL-A) FOR STEPPED FTG (SEE DETAIL D4/SB-501)

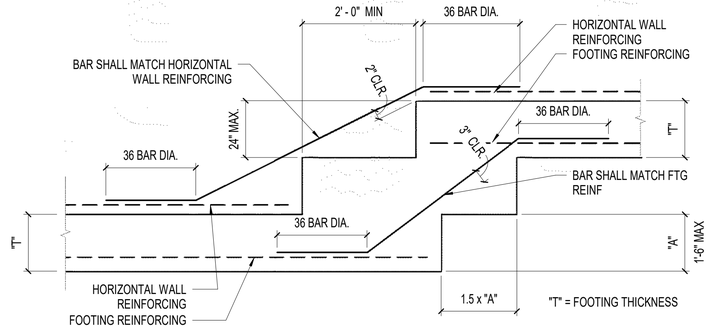
NOTE: BACKFILL AND COMPACT DITCH TO 95%

CONDITION - 3:
WHERE PIPE ELEVATION IS 24" MIN. BELOW FOOTING - NO ACTION REQUIRED. OTHERWISE, STEP FOOTING AS REQUIRED TO CLEAR PIPE (SEE CONDITION-2)

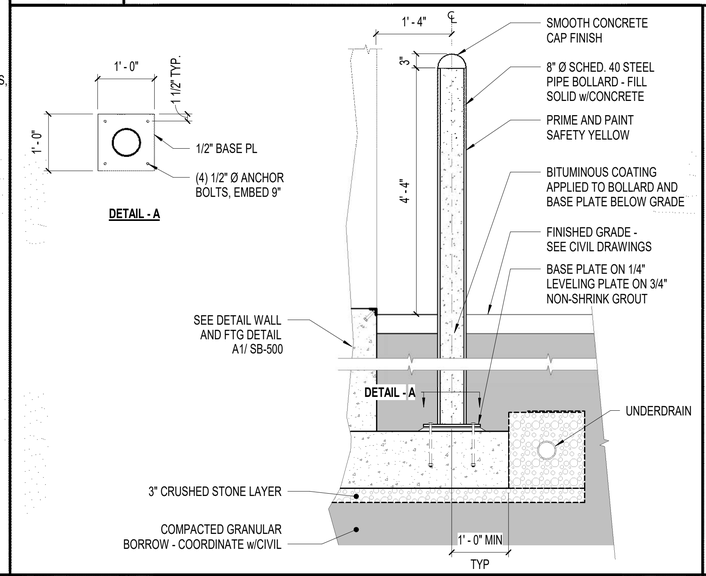
A1	TYPICAL PIPE AT FOOTING DETAIL
3/4" = 1'-0"	



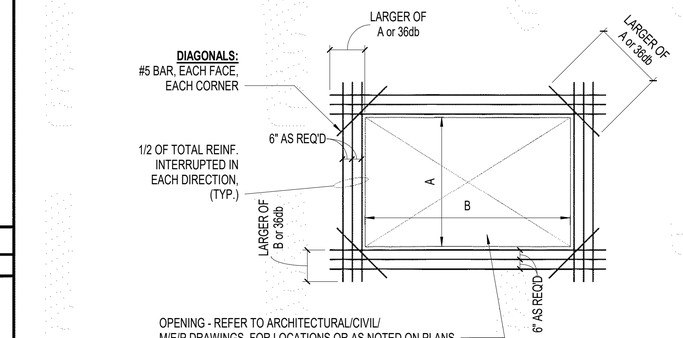
F4	TYPICAL CONTROL JOINT IN SLAB DETAIL
3/4" = 1'-0"	



D4	TYPICAL STEPPED FOOTING DETAIL
3/4" = 1'-0"	

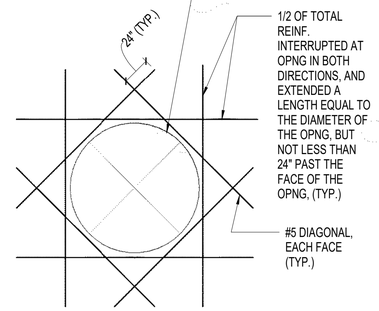


A4	TYPICAL BUILDING BOLLARD DETAIL
3/4" = 1'-0"	

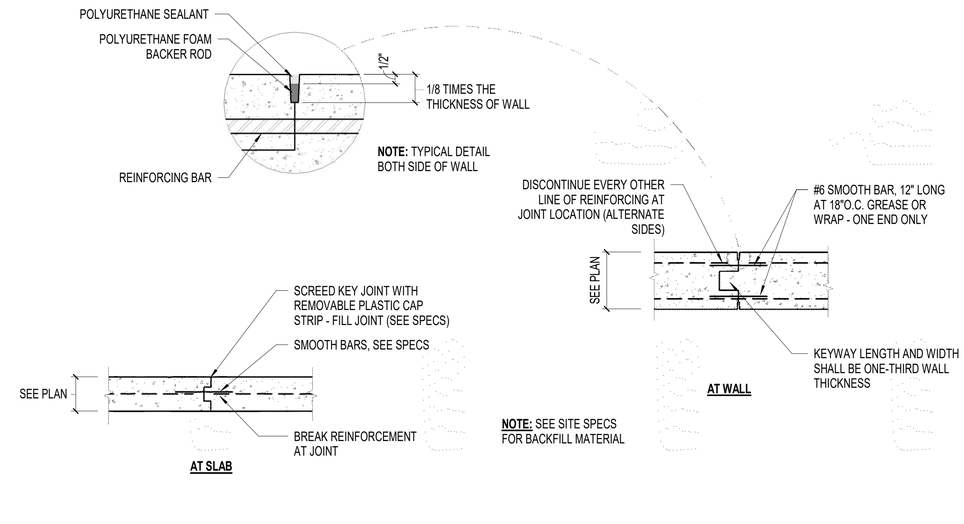


NOTES:

1. ADDITIONAL BARS ARE NOT REQUIRED WHERE EDGE OF OPENING IS WITHIN 6-INCHES OF A BEAM OR WALL, AND PARALLEL THERETO.
2. DIAGONAL BARS NOT REQUIRED AT OPENINGS SMALLER THAN 12-INCHES.
3. PROVIDE HOOKED ENDS WHERE BAR ENTENSION SHOWN IS NOT POSSIBLE.
4. IF MULTIPLE OPENINGS ARE REQUIRED - LOCATE OPENING EDGES 12-INCHES MINIMUM FROM EACH OTHER.
5. THESE DETAIL APPLY EXCEPT WHERE SHOWN OTHERWISE.



D8	TYPICAL ADDITIONAL REINFORCING FOR OPENING IN CONCRETE WALL/SLAB
3/4" = 1'-0"	



A7	TYPICAL WALL AND SLAB CONSTRUCTION JOINT DETAIL
3/4" = 1'-0"	

Scale:

As indicated

No.	Revision	By	Date

Designed by:

WILLIAM P. FAUCHER, P.E.

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STATE OF MAINE · WILLIAM P. FAUCHER No. 7133 · LICENSED PROFESSIONAL ENGINEER

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

STRUCTURAL - FOUNDATION DETAILS

SHEET NUMBER: SB-501

CONTRACT: 2022.08

PIPE ELBOW TURNED DN	BALANCING VALVE CIRCUIT SETTER
PIPE ELBOW TURNED UP	AIR VENT ~ REFER TO SPECIFICATIONS
PIPING TEE DOWN	STRAINER WITH BLOWDOWN VALVE AND CAP
PIPING TEE UP	RELIEF/SAFETY VALVE
PIPE RISER	PRESSURE GAUGE WITH COCK
45° ELBOW DOWN	PRESSURE REDUCING VALVE
PIPING TO BE REMOVED	PUMP ~ POINT OF TRIANGLE INDICATES DIRECTION OF FLOW
CAPPED PIPING	GAS SHUT-OFF VALVE
DIRECTION OF FLOW	HOSE END DRAIN VALVE W/CAP
PIPE PITCHES DOWN	THERMOMETER WITH COCK
UNION	SOLENOID VALVE
BACKFLOW PREVENTER	DIFFERENTIAL PRESSURE TRANSMITTER
FLEXIBLE CONNECTION	HOSE BIB/WALL HYDRANT
SHUT-OFF/ISOLATION VALVE REFER TO SPECIFICATIONS	FLOOR CLEANOUT
GATE VALVE ~ OUTSIDE SCREW & YOKE (OS&Y)	WALL CLEANOUT
GLOBE VALVE	
LOCKABLE BALL VALVE	
2-WAY CONTROL VALVE	
3-WAY CONTROL VALVE	
CHECK VALVE	

FLOOR DRAIN	
DUCTWORK ~ FIRST DIMENSION IS SIDE SHOWN IN INCHES S= SUPPLY, R= RETURN, E= EXHAUST AIR, OA= OUTSIDE AIR F.O. = FLAT OVAL	
ACCOUSTICAL LINING (DUCT DIMENSION FOR NET FREE AREA)	
DUCT TRANSITION	
SQUARE TO ROUND DUCT TRANSITION	
FLEX DUCT	
SUPPLY DUCT TURNED UP/DN	
RETURN DUCT TURNED UP/DN	
EXHAUST DUCT TURNED UP/DN	
ROUND DUCT TURNED UP/DN	
MITERED DUCT ELBOW W/TURNING VANES	
RADIUS DUCT ELBOW	

DUCT/PIPE CAP (SINGLE/DOUBLE LINE)	
VOLUME DAMPER	
FIRE DAMPER	
SMOKE DAMPER	
FIRE AND SMOKE DAMPER	
BACKDRAFT DAMPER	
MOTORIZED DAMPER	
FLEXIBLE CONNECTION	
TEMPERATURE SENSOR OR THERMOSTAT (AS SPECIFIED)	
HUMIDISTAT OR HUMIDITY SENSOR (AS SPECIFIED)	
CARBON DIOXIDE SENSOR	
CARBON MONOXIDE SENSOR	
ACCESS PANEL	
DUCT SMOKE DETECTOR	

EF-	ROOFTOP EXHAUST FAN
	CEILING SUPPLY DIFFUSER
	CEILING RETURN GRILLE
	CEILING EXHAUST GRILLE
	POINT OF CONNECTION - EXISTING TO NEW
	DIRECTION OF AIR FLOW

REGISTER, GRILLE & DIFFUSER TAG
- DIFFUSER, REGISTER OR GRILLE No.
- QUANTITY
- CFM AIR FLOW

FINTUBE TAG
- FINTUBE No.
- LENGTH
- GPM

VAV TAG
- VAV No.
- MINIMUM CFM
- MAXIMUM CFM
- GPM

EQUIPMENT TAG
- TYPE DESIGNATOR
- NUMBER

EQUIPMENT TAG (ON FLOOR/ROOF ABOVE)
- TYPE DESIGNATOR
- NUMBER

DETAIL REFERENCE SYMBOL
- DETAIL No.
- SHEET DETAIL LOCATED ON

SECTION REFERENCE SYMBOL
- SECTION No.
- SHEET SECTION LOCATED ON

NOTE

ALL GENERAL NOTES, SYMBOL LEGENDS AND DETAILS ARE TO BE CONSIDERED AS APPLICABLE TO ALL PLUMBING AND HVAC DRAWINGS FOR THIS PROJECT. SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY AND DO NOT INDICATE THEIR INCORPORATION INTO THE DESIGN.

D1 SYMBOLS LEGEND

NONE

AW	ACID WASTE
ATV	AIR RELIEF
BBD	BOILER BLOWDOWN
C	CONDENSATE (HVAC DRAIN PAN)
CA	COMPRESSED AIR
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CTR	COOLING TOWER RETURN
CTS	COOLING TOWER SUPPLY
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RECIRC.
D	DRAIN
FM	PUMP FORCE MAIN
FOF	FUEL OIL FILL
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FOV	FUEL OIL TANK VENT
FW	FEEDWATER
GR	GLYCOL RETURN
GS	GLYCOL SUPPLY
GW	GREASE WASTE
GWR	GEOTHERMAL WATER RETURN
GWS	GEOTHERMAL WATER SUPPLY
H	HUMIDIFICATION LINE
H2	HYDROGEN GAS
HCR	HEAT/COOL RETURN
HCS	HEAT/COOL SUPPLY
HPWR	HEAT PUMP WATER RETURN
HPWS	HEAT PUMP WATER SUPPLY
HPC	HIGH PRESSURE CONDENSATE
HPS	HIGH PRESSURE STEAM
HTWR	HIGH-TEMP HOT WATER RETURN
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
IND	INDUSTRIAL WASTE
IW	INDIRECT WASTE
LN	LIQUID NITROGEN
LOX	LIQUID OXYGEN
LP	LIQUID PETROLEUM GAS
LPR	LOW PRESSURE CONDENSATE
LPS	LOW PRESSURE STEAM
MA	MEDICAL AIR
MPR	MEDIUM PRESSURE CONDENSATE
MPS	MEDIUM PRESSURE STEAM
MUW	MAKE-UP WATER
N2	NITROGEN
NG	NATURAL GAS
NO	NITROUS OXIDE
NPW	NON-POTABLE WATER
OX	OXYGEN
PC	PUMPED CONDENSATE
PCWR	PROCESS COLD WATER RETURN
PCWS	PROCESS COLD WATER SUPPLY
RD	REFRIGERANT DISCHARGE
RL	REFRIGERANT LIQUID
RS	REFRIGERANT SUCTION
RO	REVERSE OSMOSIS WATER
RW	RAIN WATER - ABOVE FLOOR
RW	RAIN WATER - BELOW GRADE
RWO	RAIN WATER OVERFLOW - ABOVE FLOOR
RWO	RAIN WATER OVERFLOW - BELOW GRADE
SP	SPRINKLER MAIN PIPING
SWR	SOLAR WATER RETURN
SWS	SOLAR WATER SUPPLY
TP	TRAP PRIMER - ABOVE FLOOR
TP	TRAP PRIMER - BELOW GRADE
TWR	TEMPERED WATER RETURN
TWS	TEMPERED WATER SUPPLY
V	SANITARY SOIL VENT - ABOVE FLOOR
V	SANITARY SOIL VENT - BELOW GRADE
VAC	VACUUM (AIR)
VC	VACUUM CLEANING (HOUSE)
VPD	VACUUM PUMP DISCHARGE
W	SANITARY SOIL WASTE - ABOVE FLOOR
W	SANITARY SOIL WASTE - BELOW GRADE
WV	SANITARY WET VENT - ABOVE FLOOR
WV	SANITARY WET VENT - BELOW GRADE

A1 PIPING LINETYPE LEGEND

NONE

AAV	AUTOMATIC AIR VENT	ENC	ENCLOSURE	MBH	1000 BTUH/hr.
AD	ACCESS DOOR	ERU	ENERGY RECOVERY UNIT	MFR	MANUFACTURER
AFF; A.F.F.	ABOVE FINISHED FLOOR	ET	EXPANSION TANK	MIN	MINIMUM
AHU	AIR HANDLING UNIT	(E)	EXISTING	MOD	MOTOR OPERATED DAMPER
AP	ACCESS PANEL	FC	FLEXIBLE CONNECTION	MTD	MOUNTED
APPROX.	APPROXIMATE; APPROXIMATELY	FCO	FLOOR CLEANOUT	MTG	MOUNTING
ATC	AUTOMATIC TEMPERATURE CONTROL	FD-#	FLOOR DRAIN TAG	MUA	MAKE UP AIR
AV	AIR VENT	FD	FIRE DAMPER	N.C.	NORMALLY CLOSED
BDD	BACKDRAFT DAMPER	FTG	FOOTING	N.O.	NORMALLY OPEN
BFP	BACKFLOW PREVENTER	GC	GENERAL CONTRACTOR	NG	NATURAL GAS
BLDG	BUILDING	GPM	GALLONS PER MINUTE	NIC	NOT IN CONTRACT
BOD	BOTTOM OF DUCT	GRV	GRAVITY ROOF VENTILATOR	NPT	NATIONAL PIPE THREAD
CONV.	CONVECTOR	H	HUMIDIFIER	NTS	NOT TO SCALE
CFM	CUBIC FEET PER MINUTE	HB	HOSE BIBB	OD	OUTSIDE DIAMETER
CLG	CEILING	HC; HDC	HANDICAP ACCESS	OED	OPEN ENDED DUCT
CO	CLEANOUT	HGT; HT	HEIGHT	P-#	PLUMBING FIXTURE TAG
CONN	CONNECT; CONNECTION	HP	HEAT PUMP	PRS	PRESSURE REDUCING STATION
CONT.	CONTINUE; CONTINUATION	HRU	HEAT RECOVERY UNIT	RD	ROOF DRAIN
COORD.	COORDINATE	HVAC	HEATING, VENTILATING AND AC	RHC	REHEAT COIL
CTE	CONNECT TO EXISTING	HW	HOT WATER	RM	ROOM
CTR	CENTER	HWR	HOT WATER RETURN	RPZ	REDUCED PRESSURE BFP
CU	COPPER; CONDENSING UNIT	HWS	HOT WATER SUPPLY	RR	RETURN REGISTER
DDC	DIRECT DIGITAL CONTROL	HX	HEAT EXCHANGER	RV	RELIEF VALVE
DIC	DOWN IN CHASE	INCL.	INCLUDING	RW	RAIN WATER
DIW	DOWN IN WALL	LP	LIQUID PETROLEUM GAS	S	SUPPLY AIR
DN	DOWN	LPR	LOW PRESSURE STEAM RETURN	SA-" "	SHOCK ABSORBER OF PDI SIZE (" ") AS INDICATED
EF	EXHAUST FAN	LPS	LOW PRESSURE STEAM SUPPLY		
ELEV	ELEVATION	MAX	MAXIMUM	SCV	SELF-CONTAINED VALVE
				SPLR	SPRINKLER
				SQ. FT; SF	SQUARE FEET
				S.S.	STAINLESS STEEL
				TD	TRENCH DRAIN
				TP	TRAP PRIMER
				TSP	TOTAL STATIC PRESSURE
				TTS	TIGHT TO STEEL
				TYP	TYPICAL
				UH	UNIT HEATER
				UIC	UP IN CHASE
				UIW	UP IN WALL
				VAC	VACUUM
				VCFF	VALVE & CAP FOR FUTURE
				W/	WITH
				WB	WET BULB TEMPERATURE, °F
				WCO	WALL CLEANOUT
				WH	WATER HEATER
				WHYD	WALL HYDRANT

A5 ABBREVIATIONS

NONE

Scale: 12" = 1'-0"

No.	Revision	By	Date

Designed by: Anthony S. Davis, P.E.

ISSUED FOR BID

STATE OF MAINE — ANTHONY S. DAVIS No. 8834 — LICENSED PROFESSIONAL ENGINEER

	By	Date		By	Date
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P: 207.221.2260
F: 207.221.2266
Web:www.allied-eng.com

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

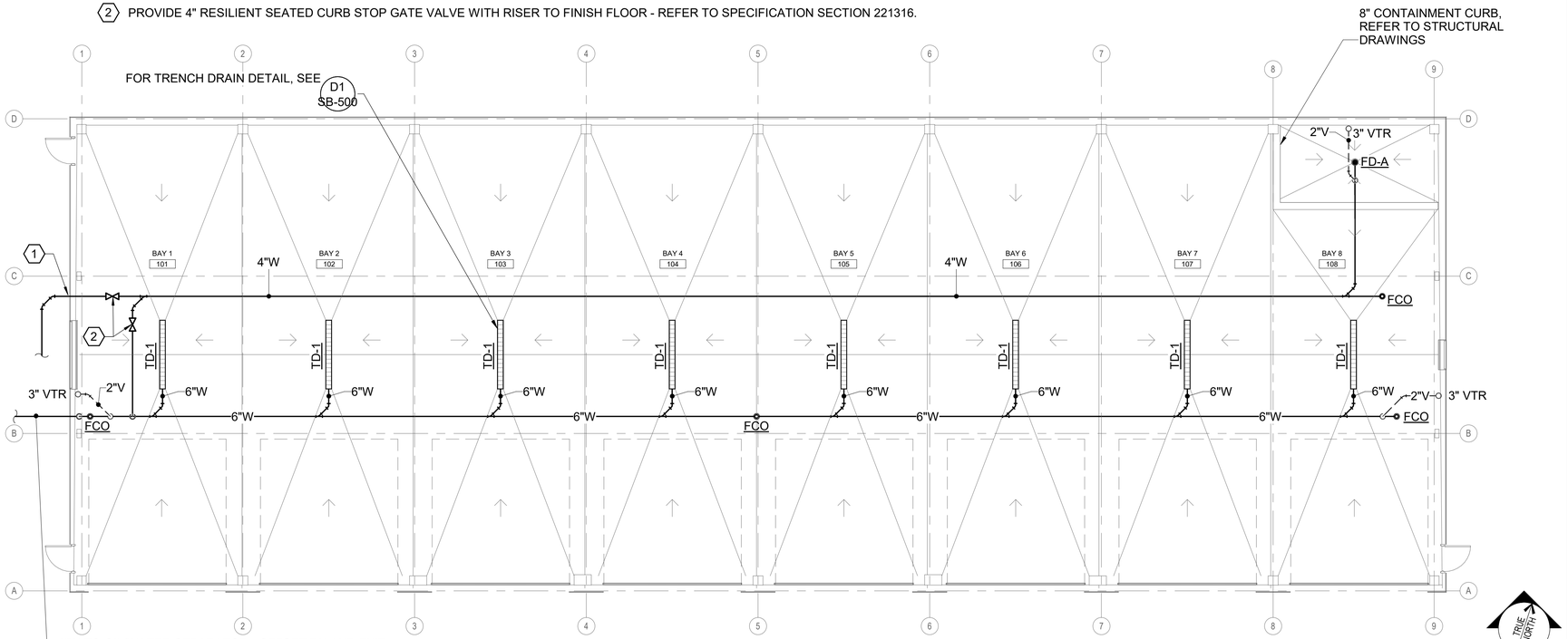
PLUMBING AND HVAC NOTES, LEGEND AND ABBREVIATIONS

SHEET NUMBER: P000

CONTRACT: 2022.08

KEYED NOTES:

1. EXIT THE FACILITY AT APPROXIMATE INV. = 344.7, CROSSING OVER FOUNDATION DRAIN. REFER TO SITE UTILITY PLAN C-101 FOR CONTINUATION.
2. PROVIDE 4" RESILIENT SEATED CURB STOP GATE VALVE WITH RISER TO FINISH FLOOR - REFER TO SPECIFICATION SECTION 221316.



A1	SANITARY PIPING PLAN
1/8" = 1'-0"	

Scale: 1/8" = 1'-0"

No.	Revision	By	Date

Designed by:

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

SANITARY PIPING PLAN

SHEET NUMBER: PL100

CONTRACT: 2022.08

ELECTRIC WATER HEATER SCHEDULE

TAG	MANUFACTURER	MODEL	VOLTS	PHASE	HEAT INPUT (KW)	GPH RECOVERY	TEMP RISE (DEG-F)	WATER STORAGE (GAL)	HEIGHT (INCHES)	DIAMETER (INCHES)	APPROX WEIGHT (LBS.)
WH-1	AO SMITH	EJC-10	120	1	1.65	8	90	10	18	16	130
Note: Water Heater suspended in wall pan shelf equal to Holdrite #30-SWHP-M											

EXPANSION TANK SCHEDULE

SYSTEM	DOMESTIC HOT WATER
PIPE SIZE	3/4"
BLADDER-TYPE EXPANSION TANK	
MFR-MODEL	AMTROL ST-5
TANK DIAMETER	8
TANK HEIGHT	13
ACCEPTANCE VOLUME	2
WEIGHT LBS	5

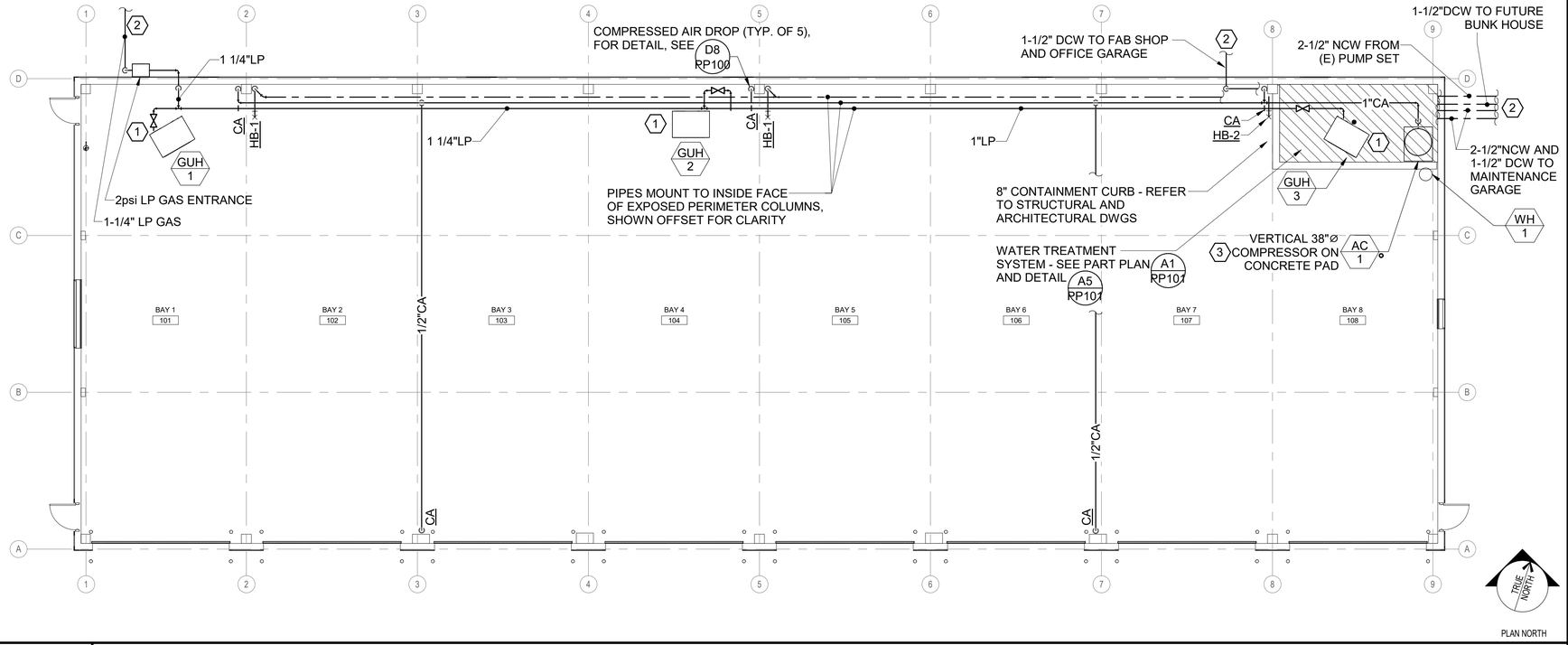
AIR COMPRESSOR SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	MAXIMUM FLOW EA. PUMP (acfm)	MAXIMUM PUMP PRESS. (psig)	RECEIVER			ELECTRICAL				PHYSICAL	NOTES
						SIZE (gal.)	RECEIVER TYPE	DIA. (in.)	MOTOR QUAN.	MOTOR SIZE (hp)	MOTOR SPEED (rpm)	VOLT/PH	LENGTH/ WIDTH/ HEIGHT (in.)	
AC-1	INGERSOLL RAND	2475N7.5	2-STAGE RECIP	24	175	80	VERTICAL	38	1	7.5	---	230/1	38/26/70	

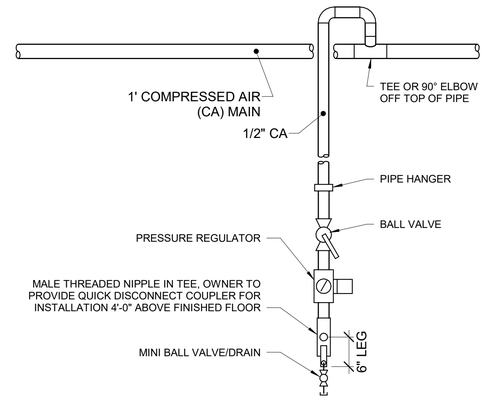
D1	PLUMBING SCHEDULES
NONE	

KEYED NOTES:

1. FURNISH AND INSTALL AN APPLIANCE GAS PRESSURE REGULATOR AS SPECIFIED, SIZED FOR 2psig INLET PRESSURE AND 10" W.C. OUTLET PRESSURE, IN ACCORDANCE WITH THE HEATER MANUFACTURER'S REQUIREMENTS.
2. REFER TO CIVIL DRAWINGS FOR CONTINUATION.
3. DRAINS ASSOCIATED WITH COALESCING FILTERS SHALL DISCHARGE ON THE GARAGE SLAB SIDE OF THE CONTAINMENT CURB.



A1	DOMESTIC PIPING PLAN
1/8" = 1'-0"	



D8	DETAIL ~ COMPRESSED AIR TOOL CONNECTION PIPING
NOT TO SCALE	

A8	DETAIL - DOMESTIC WATER HEATER PIPING SCHEMATIC - WH-1
NOT TO SCALE	

Scale: As indicated

No.	Revision	By	Date

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

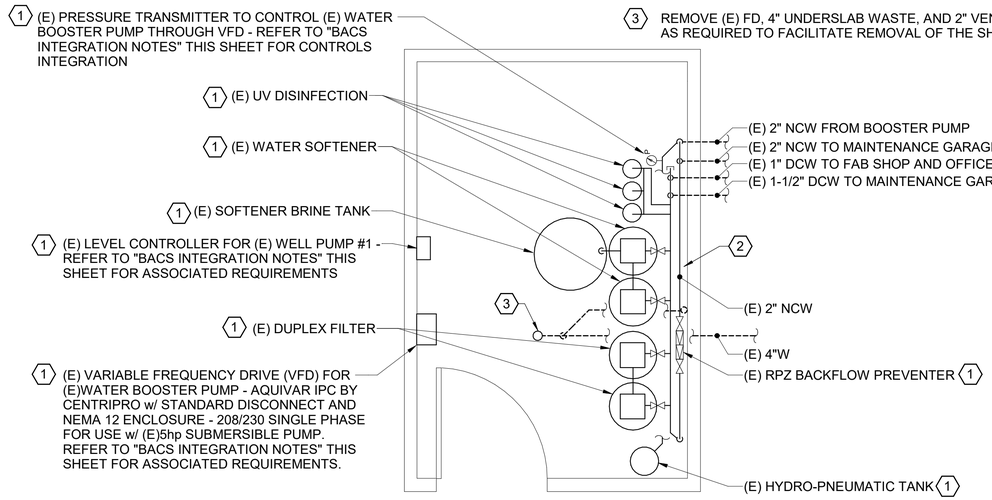
DOMESTIC PIPING PLAN

SHEET NUMBER: PP100

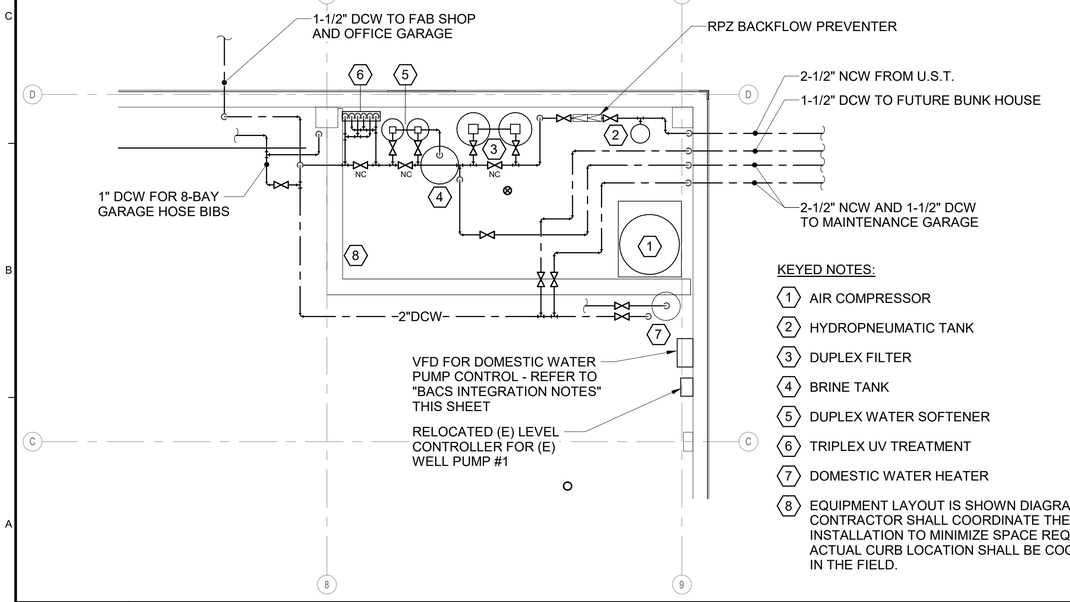
CONTRACT: 2022.08

KEYED NOTES:

1. RELOCATE (E) EQUIPMENT FROM THE TREATMENT SHED TO THE NEW 8-BAY GARAGE.
2. EXISTING EQUIPMENT LAYOUT IS SHOWN DIAGRAMATICALLY, VERIFY ACTUAL LAYOUT IN FIELD.
3. REMOVE (E) FD, 4" UNDERSLAB WASTE, AND 2" VENT PIPING AS REQUIRED TO FACILITATE REMOVAL OF THE SHED.



C1	EXISTING WATER TREATMENT SHED
NONE	



KEYED NOTES:

1. AIR COMPRESSOR
2. HYDROPNEUMATIC TANK
3. DUPLEX FILTER
4. BRINE TANK
5. DUPLEX WATER SOFTENER
6. TRIPLEX UV TREATMENT
7. DOMESTIC WATER HEATER
8. EQUIPMENT LAYOUT IS SHOWN DIAGRAMATICALLY. CONTRACTOR SHALL COORDINATE THE INSTALLATION TO MINIMIZE SPACE REQUIREMENTS. ACTUAL CURB LOCATION SHALL BE COORDINATED IN THE FIELD.

A1	WATER TREATMENT PART PLAN
1/4" = 1'-0"	

BACS INTEGRATION REQUIREMENTS

1. THE PROJECT SCOPE SHALL INCLUDE RESTORATION OF THE EXISTING BUILDING AUTOMATION CONTROL SYSTEM (BACS) INTERFACE FOR WATER PUMPING AND TREATMENT SYSTEM. REFER TO SPECIFICATION SECTIONS 230900 AND 230993. THE BACS WORK SHALL BE FURNISHED AND INSTALLED BY XL AUTOMATION SOLUTIONS - DAVID TANNER.
2. RESTORATION SCOPE SHALL INCLUDE VARIABLE SPEED CONTROL FOR THE EXISTING BOOSTER PUMPS FROM THE RELOCATED VFD IN THE NEW 8-BAY AND RESTORATION FOR MONITORING THE WATER SOFTENER SYSTEM - RELOCATED FROM THE TEMPORARY SHED TO THE NEW 8-BAY.
3. THE PROJECT SCOPE SHALL ADD LOW WATER LEVEL ALARM FOR THE EXISTING WATER TANK, BOTH THROUGH THE EXISTING BACS CONTROL FRONT END AT THE MAINTENANCE GARAGE AND VIA VISUAL ALARM AT THE MAINTENANCE GARAGE. THE ALARM SYSTEM SHALL INCLUDE AN ULTRASONIC LEVEL SENSOR BY FLOWLINE, MODEL UG03-0001-40 MOUNTED IN THE TANK UNDER THE SCOPE OF THIS PROJECT PER MANUFACTURER'S REQUIREMENTS.
4. THE PROJECT SCOPE SHALL RESTORE CONTROL FOR WELL PUMP #1 FROM THE RELOCATED CONTROLLER IN THE NEW 8-BAY. PUMP SHALL OPERATE IN CONJUNCTION WITH (E) WELL PUMP #2 TO MAINTAIN WATER LEVEL IN (E) WATER STORAGE TANK.
5. COORDINATE WITH ELECTRICAL SITE PLAN ES-100 FOR REQUIRED UNDERGROUND CONDUIT INSTALLATIONS AT THE SITE.

E5	BACS INTEGRATION NOTES
NONE	

KEYED NOTES:

1. DOUBLE CHECK BACKFLOW PREVENTER.
2. HIGH EFFICIENCY DUPLEX DEPTH FILTER EQUAL TO CULLIGAN CTM-DF21 PROGRESSIVE FLOW FILTER W/SMART METER AND BYPASS KIT - 48 GPM @ 5psig DROP.
3. TWIN WATER SOFTENER SYSTEM EQUAL TO CULLIGAN CTM-60 TWIN WATER SOFTENER KIT W/SMART METER AND BYPASS KIT - 50 GPM @ 3psig DROP.
4. UV DISINFECTION SYSTEM EQUAL TO VIQUA MODEL VH410M, TRIPLEX, 54 GPM CAPACITY.
5. WATER SOFTENER SALT TANK.
6. (1)20gal. HYDROPNEUMATIC TANK (LOCATE IN (E)8 BAY BUILDING)

GENERAL NOTES:

1. COORDINATE w/ DIVISION 26 FOR POWER REQUIREMENTS ASSOCIATED WITH ALL COMPONENTS OF THE WATER TREATMENT SYSTEM.
2. ALL COMPONENTS OF THE WATER TREATMENT SYSTEM SHOWN HEREIN UNLESS OTHERWISE NOTED ARE CURRENTLY IN OPERATION AT THE SITE, LOCATED IN THE TEMPORARY WATER TREATMENT SHED (SEE SITE PLAN FOR LOCATION). UNDER THE SCOPE OF THIS PROJECT, THE CONTRACTOR SHALL RELOCATE THE OWNER FURNISHED EQUIPMENT FOR USE AND LOCATION IN THE NEW 8-BAY GARAGE AS DETAILED. THE CONTRACTOR SHALL STRICTLY SCHEDULE THE WORK WITH MTA AND SHALL PHASE THE WORK IN A MANNER WHICH MINIMIZES DOWNTIME OF THE SYSTEM TO THE EXTENT POSSIBLE. REFER TO EXISTING WATER TREATMENT SHED PLAN - THIS SHEET.
3. BASIS OF DESIGN FOR TREATMENT SYSTEM IS CULLIGAN COMMERCIAL REPRESENTED BY WATER TREATMENT, INC (WTE, INC), YARMOUTH, MAINE. IN THE EVENT THAT EXISTING EQUIPMENT IS DISCOVERED TO VARY FROM THAT DETAILED HEREIN, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY MTA AND HNTB TO DOCUMENT AND CLARIFY THE DISCREPANCY.

A5	DETAIL - DOMESTIC WATER ENTRANCE PIPING
NONE	

Scale: As indicated

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

WATER TREATMENT PIPING PLAN

SHEET NUMBER: PP101

CONTRACT: 2022.08

LOUVER SCHEDULE

TAG	MAKE - MODEL	AIR SYSTEM	DUTY	CFM	DIMENSIONS						BEGINNING POINT OF WATER PENETRATI...	MAX P.D. MAX W.C.	SCREEN	NOTES
					HEIGHT (IN.)	WIDTH (IN.)	MIN. FREE AREA (SF)	NET VELOCITY (FT/MIN)	% FREE AREA	BLADE DEPTH				
L-1	RUSKIN ELF445DX	EF-1	INTAKE	13,500	72	96	26	519.2	54.2%	4"	873 FPM	0.06	SEE SPEC	

FAN SCHEDULE

TAG	SERVES	MANUFACTURER-MODEL	TYPE	DRIVE	CFM	ESP	MOTOR HP	VOLTS/ PH	VFD	MAX SONES	DAMPER	WEIGHT (LBS.)	NOTES
EF-1	GARAGE EXHAUST	LOREN COOK - 36XMWH	WALL MOUNT w/HOOD	DIRECT	13,500	0.6	3	230/3	YES	30.0	MOD	500	1, 3, 4, 5
DF-1 thru 4	DESTRATIFICATION	ZOO FANS H60 PREMIUM	DESTRAT. FAN	DIRECT	1,500	--	106w	115/1	NO	--	N/A	23	2

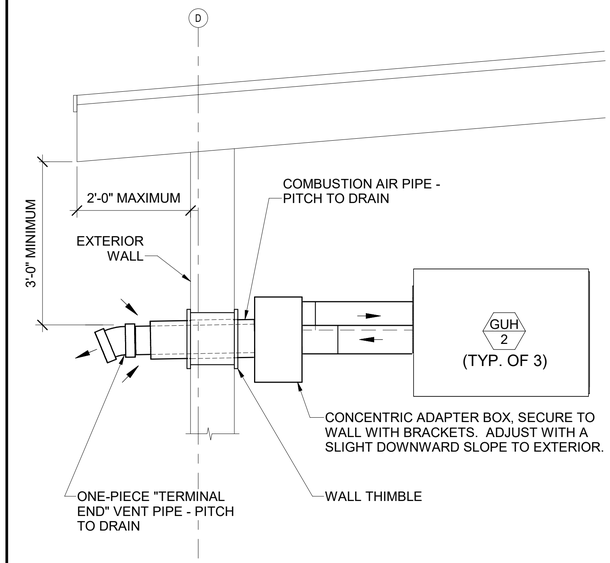
NOTES:
1. PROVIDE UNIT MOUNTED FACTORY DISCONNECT SWITCH.
2. PROVIDE WALL MOUNTED VARIABLE SPEED CONTROLLER
3. INTERLOCK WITH LOUVER AND EF MOD'S
4. PROVIDE WALL MOUNTED TIMER SWITCH AS MANUFACTURED BY INTERMATIC, MODEL FF2H OR EQUAL. COORDINATE WITH DIVISION 26 FOR OPERATION AS SPECIFIED.
5. PROVIDE WALL MOUNTED VARIABLE SPEED DRIVE EQUAL TO INVERTEK E3 SERIES, 230 SINGLE PHASE INPUT AND 230 THREE PHASE OUTPUT.

LP GAS FIRED SEALED COMBUSTION UNIT HEATER SCHEDULE

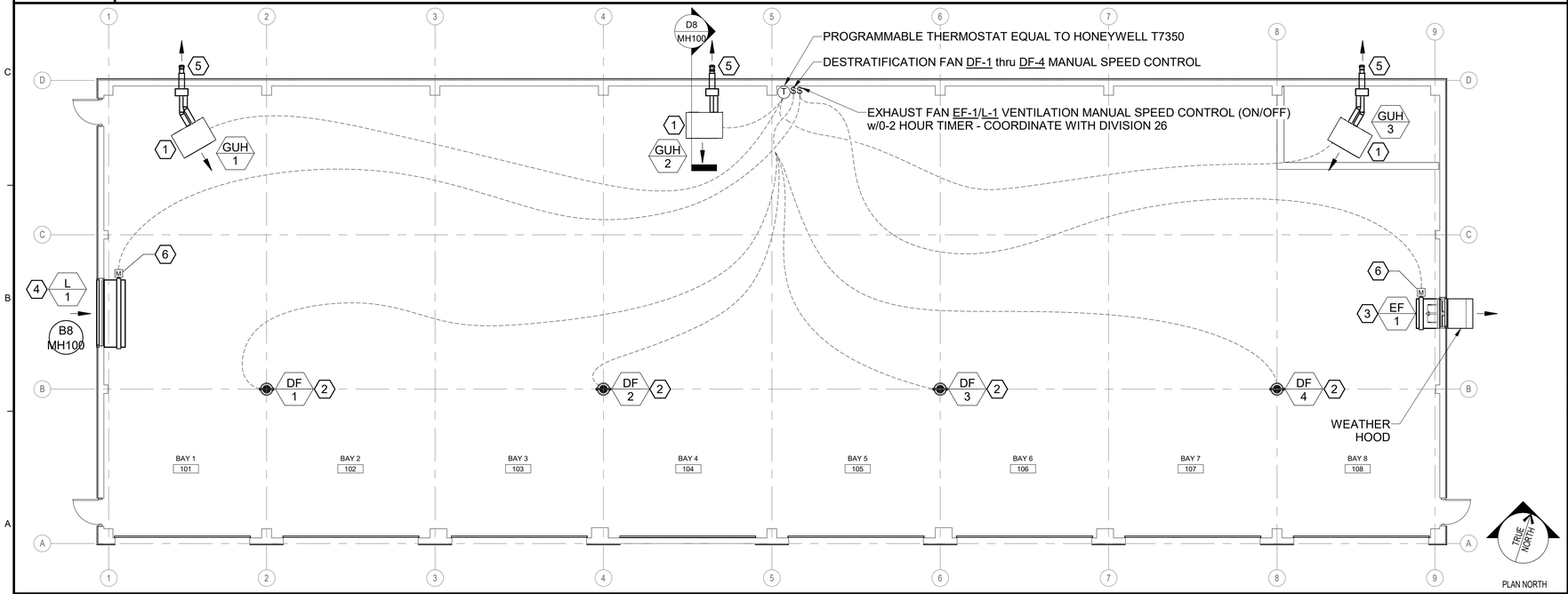
TAG	SERVES	MFR. -MODEL	SIZE	TYPE	EXPOSED FACE DIM.	DEPTH DIM.	WEIGHT LBs	INPUT MBH	OUPUT MBH	DISCHARGE TEMP RISE	GAS PRESSURE RANGE (MIN-MAX)	GAS CONN. SIZE	CFM	VENT CONN.	COMB. AIR	MOTOR HP	MOP (AMPS)	ELECT	NOTES
GUH - 1	GARAGE	REZNOR - UDZ	300	LP GAS FIRED SEPARATED COMBUSTION	41" x 34"	48"	331	300	249	50-60F	7" -14"	3/4"	3840	6"	6"	1/2	20	115/1/60	1,2
GUH - 2	GARAGE	REZNOR - UDZ	300	LP GAS FIRED SEPARATED COMBUSTION	41" x 34"	48"	331	300	249	50-60F	7" -14"	3/4"	3840	6"	6"	1/2	20	115/1/60	1,2
GUH - 3	GARAGE	REZNOR - UDZ	300	LP GAS FIRED SEPARATED COMBUSTION	41" x 34"	48"	331	300	249	50-60F	7" -14"	3/4"	3840	6"	6"	1/2	20	115/1/60	1,2

NOTES: 1. Standard Built-in (20A) Disconnect Switch
2. Concentric Venting

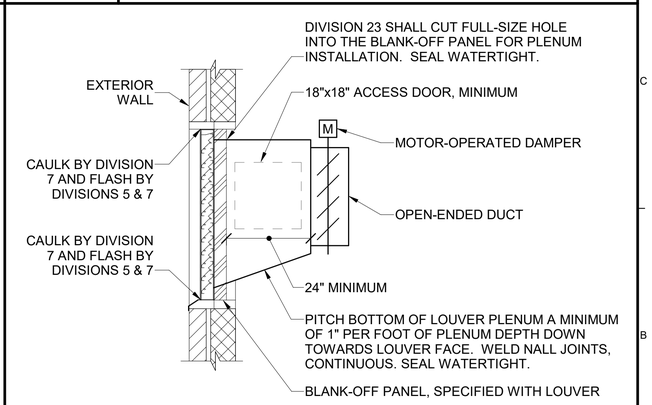
D1	MECHANICAL SCHEDULES
NONE	



D8	DETAIL - GAS FIRED UNIT HEATER CONCENTRIC VENTING
NOT TO SCALE	TYPICAL FOR ALL



A1	MECHANICAL PLAN
1/8" = 1'-0"	



B8	DETAIL - EXTERIOR LOUVER
NOT TO SCALE	

1. MOUNT UNIT HIGH AS POSSIBLE, TIGHT TO ROOF STRUCTURE, MAINTAINING MANUFACTURER'S MINIMUM RECOMMENDED CLEARANCES - APPROXIMATELY 13'-0" ABOVE FINISHED FLOOR.
2. BOTTOM OF FAN = 14'-0" ABOVE FINISHED FLOOR.
3. BOTTOM OF FAN = 8'-0" ABOVE FINISHED FLOOR.
4. BOTTOM OF LOUVER = 6'-0" ABOVE FINISHED FLOOR.
5. CONCENTRIC 6" EXHAUST VENT / 8" OUTSIDE AIR VENT THRU EXTERIOR WALL.
6. LINE VOLTAGE MOD (110V) - COORDINATE WITH DIVISION 26.

A8	KEYED NOTES
NONE	

Scale: As indicated

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MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

MECHANICAL PLAN

SHEET NUMBER: MH100

CONTRACT: 2022.08

A	AMPERE	MC	MICROPHONE
AC	ALTERNATING CURRENT	MW	MICROWAVE
AFF	ABOVE FINISHED FLOOR	MLO	MAIN LUG ONLY
AFG	ABOVE FINISHED GRADE	MT	MOUNT
AHU	AIR HANDLING UNIT	MTS	MANUAL TRANSFER SWITCH
AIC	AMPERES INTERRUPTING CAPACITY	MCP	MOTOR CONTROL PANEL
ATS	AUTOMATIC TRANSFER SWITCH	MH	METAL HALIDE
AWG	AMERICAN WIRE GAUGE	MDP	MAIN DISTRIBUTION PANEL
BAS	BUILDING AUTOMATION SYSTEM	MIN	MINIMUM
BKBD	BACKBOARD	N	NEUTRAL
C	CONDUIT	NC	NORMALLY CLOSED
CAT	CATALOG, CATEGORY	NEC	NATIONAL ELECTRICAL CODE
CATV	CABLE TV	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
CB	CIRCUIT BREAKER	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CCTV	CLOSED CIRCUIT TELEVISION	NIC	NOT IN CONTRACT
CM	CIRCULAR MILS	NF	NON-FUSED
COMM	COMMUNICATIONS	NO	NORMALLY OPEN
CU	MECH CONDENSING UNIT	NO., #	NUMBER
CU	COPPER	NTS	NOT TO SCALE
CUH	CABINET UNIT HEATER	OC	ON CENTER
CR	CORD REEL		
DC	DIRECT CURRENT	OCC	OCCUPANCY
DDC	DIGITAL DIRECT CONTROL	OH	OVERHEAD
DN	DOWN	P	POLE
DW	DISHWASHER	PA	PUBLIC ADDRESS
DWG	DRAWING	PB	PULLBOX
EF	EXHAUST FAN	PH, Ø	PHASE
ELEV	ELEVATOR	PIR	PASSIVE INFRARED
EMT	ELECTRICAL METALLIC TUBING	PNL	PANELBOARD
EP	EXPLOSION PROOF	P/O	PART OF
ERU	ENERGY RECOVERY UNIT	PV	PHOTOVOLTAIC
EWC	ELECTRIC WATER COOLER	PVC	POLY-VINYL CHLORIDE
FACP	FIRE ALARM CONTROL PANEL	REC	RECEPTACLE
FB	FLOOR BOX	REF	REFRIGERATOR
FLA	FULL LOAD AMPS	RF	RETURN FAN
FWE	FURNISHED WITH EQUIPMENT	RGS	RIGID GALVANIZED STEEL
G, GND	GROUND	RM	ROOM
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	RMC	RIGID METAL CONDUIT
GFP	GROUND FAULT PROTECTION	RTU	ROOFTOP UNIT
HID	HIGH INTENSITY DISCHARGE	REF	REFRIGERATOR
HOA	HAND-OFF-AUTO SELECTOR SWITCH	SF	SUPPLY FAN
HP	HORSEPOWER	SPDT	SINGLE POLE, DOUBLE THROW
HVAC	HEATING, VENTILATION AND COOLING UNIT	SQ	SQUARE
IDS	INTRUSION DETECTION SYSTEM	TEL	TELEPHONE
IG	ISOLATED GROUND	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
IMC	INTERMEDIATE METAL CONDUIT	TYP	TYPICAL
IR	INFRARED	UF	UNDER FLOOR
K	KILO	UG	UNDERGROUND
KCMIL	KILO CIRCULAR MILS	UH	UNIT HEATER
KW	KILOWATT	UL	UNDERWRITER'S LABORATORY
KVA	KILO VOLT-AMPS	UNO	UNLESS NOTED OTHERWISE
LAN	LOCAL AREA NETWORK	UPS	UNINTERRUPTIBLE POWER SUPPLY
LC	LIGHTING CONTACTOR	V	VOLTS
LF	LINEAR FEET	VFD	VARIABLE FREQUENCY DRIVE
LC	LOADCENTER	W	WATT
LCP	LIGHTING CONTROL PANEL	WP	WEATHERPROOF
LED	LIGHT EMITTING DIODE	WG	WIREGUARD
LTG	LIGHTING	XFMR	TRANSFORMER
LTS	LIGHTS		
MAX	MAXIMUM	(E)	EXISTING ITEM TO REMAIN
MCB	MAIN CIRCUIT BREAKER	(R)	REMOVE ITEM AND DISPOSE OF PROPERLY
MECH	MECHANICAL	(ER)	RELOCATED ITEM AT NEW LOCATION
MH	MOUNTING HEIGHT	(RL)	REMOVE AND RELOCATE

SWITCHES

- $a — LIGHT SWITCH, 20A,125/277V
- $3 — THREE-WAY LIGHT SWITCH
- $4 — FOUR-WAY LIGHT SWITCH
- $2 — TWO-POLE SWITCH
- $M — MOTOR RATED SWITCH WITH THERMAL OVERLOAD
- $P — SINGLE POLE SWITCH WITH RED PILOT LIGHT ~ RED LIGHT SHALL GLOW WHEN CIRCUIT IS ENERGIZED
- $a, $b — MULTI-GANGED SWITCHES, GANG UNDER ONE PLATE, LETTER INDICATES SWITCHING
- $OS — OCCUPANCY SENSOR SWITCH, WALL MOUNTED
- (OS) — OCCUPANCY SENSOR, CEILING MOUNTED
- (OS) — OCCUPANCY SENSOR, WALL MOUNTED
- $LV — LOW VOLTAGE LIGHT SWITCH, MOMENTARY CONTACT GROUPS
- $LVab — LOW VOLTAGE LIGHT SWITCH CONTROLLING MULTIPLE LIGHTING
- LTC — LIGHTING TIME CLOCK
- LC — LIGHTING CONTACTOR
- LCP — LIGHTING CONTROL PANEL
- (PC) — OUTDOOR PHOTOELECTRIC SWITCH

NOTES:

1. MOUNT LIGHT SWITCHES WITH CENTERLINE 54" AFF, UNO
2. LOWER CASE LETTER AT SWITCH INDICATES SWITCHING

EMERGENCY LIGHTING

- EM — HATCHING INDICATES EGRESS FIXTURE WITH BATTERY BALLAST ~ "EM" INDICATES EMERGENCY WHERE SYMBOL HATCHING IS UNCLEAR
- EXIT SIGN, CEILING MOUNTED, SHADING INDICATES FACE(S) ARROWHEAD INDICATES CHEVRON(S) REQUIRED, CONNECT TO UNSWITCHED PORTION OF AREA LIGHTING BRANCH CIRCUIT, U.N.O.
- EXIT SIGN, WALL MOUNTED, SHADING INDICATES FACE(S) MOUNT AT 7'-6"AFF OR OVER DOOR, CONNECT TO UNSWITCHED PORTION OF AREA LIGHTING BRANCH CIRCUIT, U.N.O.
- INV — CENTRAL LIGHTING INVERTER

REFER TO LUMINAIRE SCHEDULE FOR FIXTURE TYPES

TYPICAL FOR ALL FIXTURE TYPES :

- R1 — INDICATES LUMINAIRE TYPE ON SCHEDULE
- a — LOWER CASE LETTER INDICATES SWITCH GROUP

SINGLE RECEPTACLES

MOUNT 54" AFF U.N.O.

- (A) — REFER TO SPECIAL RECEPTACLE SCHEDULE
- (A) CD — OVERHEAD SINGLE RECEPTACLE CORD DROP

NOTE:

PROVIDE MATCHING CORD AND PLUG FOR SINGLE RECEPTACLES FOR NEW EQUIPMENT AND WHERE NOTED FOR RELOCATED EQUIPMENT

FLOOR AND CEILING DEVICES

- F — DUPLEX RECEPTACLE, 20A, 125V, 2P, 3W, NEMA 5-20R, MOUNT IN FLUSH FLOOR BOX
- F — DOUBLE DUPLEX RECEPTACLE, 20A, 125V, 2P, 3W, NEMA 5-20R, MOUNT IN FLUSH FLOOR BOX
- P — DUPLEX RECEPTACLE, PEDESTAL MOUNTED
- P — SINGLE RECEPTACLE, PEDESTAL MOUNTED
- C — DUPLEX RECEPTACLE, FLUSH MOUNTED IN CEILING
- C — DOUBLE DUPLEX RECEPTACLE, FLUSH MOUNTED IN CEILING
- C — DUPLEX GFCI RECEPTACLE, FLUSH MOUNTED IN CEILING
- C — DOUBLE DUPLEX GFCI RECEPTACLE, FLUSH MOUNTED IN CEILING
- CR — OVERHEAD RECEPTACLE DROP, DUPLEX ~ CR= CORD REEL
- CR — OVERHEAD RECEPTACLE DROP, DOUBLE DUPLEX ~ CR= CORD REEL
- CR — OVERHEAD RECEPTACLE DROP, GFCI ~ CR= CORD REEL

RECEPTACLES

- DUPLEX RECEPTACLE ~ 20A, 125V, 2P, 3W, NEMA 5-20R
- DOUBLE DUPLEX RECEPTACLE
- GFCI DUPLEX RECEPTACLE, MOUNT 54" AFF UNO
- GFCI DOUBLE DUPLEX RECEPTACLE, MOUNT 54" AFF UNO
- EWC — GFCI RECEPTACLE FOR ELECTRIC WATER COOLER - COORDINATE LOCATION WITH DIVISION 22.
- WP — GFCI RECEPTACLE WITH WEATHERPROOF COVER
- WP — GFCI RECEPTACLE IN WP ENCLOSURE ON ROOF

NOTES:

1. MOUNT RECEPTACLES WITH CENTERLINE 18" AFF UNO
2. MOUNT EXTERIOR RECEPTACLES WITH CENTERLINE 24" AFG UNO

POWER DISTRIBUTION

- PANELBOARD ~ SURFACE MOUNTED
- PANELBOARD ~ FLUSH MOUNTED
- AS / AF — FUSED DISCONNECT SWITCH
- NON-FUSED DISCONNECT SWITCH
- 00 — MOTOR STARTER ~ NUMBER INDICATES NEMA SIZE
- 00 — COMBINATION MOTOR STARTER/FUSED DISCONNECT
- MOTOR OR FAN
- M — METER AND CABINET
- J — JUNCTION BOX
- J — JUNCTION BOX ~ WALL MOUNTED
- J2 — DOUBLE GANG JUNCTION BOX ~ WALL MTD 18" AFF
- C J — JUNCTION BOX ~ FLUSH CEILING MOUNTED
- P J — JUNCTION BOX ~ PEDESTAL MOUNTED
- T# — TRANSFORMER ~ NUMBER INDICATES DESIGNATION SEE TRANSFORMER SCHEDULE
- VFD — VARIABLE FREQUENCY DRIVE
- TVSS — TRANSIENT VOLTAGE SURGE SUPPRESSOR
- S — POWER SHUTOFF SWITCH ~ WALL MOUNTED 48" TO CENTER LINE
- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- WIRING UNDERGROUND OR UNDERSLAB
- HOMERUN ~ (2)#12+(1)#12G UNO (EXCEPT LIGHTING CIRCUITS: (1)#12+(1)#10N+(1)#12G UNO)
- SINGLE-PHASE HOMERUN OR MULTIPLE HOMERUN UTILIZING THE SAME CONDUIT
- 3-PHASE HOMERUN OR MULTIPLE HOMERUN UTILIZING THE SAME CONDUIT
- FLEXIBLE CONNECTION
- GROUNDING SYSTEM
- P — MOTORIZED DOOR OPERATOR AND PUSH PADDLE ~ FURNISHED BY DIV 08, WIRED BY DIV 26
- CB — ENCLOSED CIRCUIT BREAKER
- ATS — AUTOMATIC TRANSFER SWITCH
- H — HAND DRYER, COORDINATE HEIGHT WITH ARCHITECTURAL PLANS
- C — ENCLOSED CONTACTOR
- H — HANDHOLE, MINIMUM 18"x36"x24", SIZE PER NEC FOR NUMBER OF CONDUITS INSTALLED.
- G — GAS DETECTOR, LOCAL ALARM ONLY
- CO — CARBON MONOXIDE DETECTOR, LOCAL ALARM ONLY

- CR — CARD READER ~ PROVIDE RECESSED WALL MOUNTED SINGLE-GANG BOX 44" AFF WITH 3/4" CONDUIT. EXTERIOR BOXES SHALL BE WEATHERPROOF. DIVISION 26 TO PROVIDE 3/4" CONDUIT FROM CARD READER TO JUNCTION BOX WHICH SHALL BE LOCATED 24" ABOVE DOOR ON THE INTERIOR. CARD READER (MODEL ALLEGIAN MT15) PROVIDED BY OTHERS.
- L — DOOR LOCK ~ PROVIDE EMPTY 1/2" RECESSED CONDUIT WITH PULL STRING IN DOOR FRAME, RUN FROM DOOR LOCK LOCATION IN FRAME TO DOOR LOCK POWER LOCATION.
- D — DOOR LOCK POWER ~ POWER SUPPLIES BY OTHERS.

NOTES

1. DOOR HARDWARE BY DIV 8 U.N.O.
2. LOW VOLTAGE WIRING AND DEVICES BY OWNER UNLESS NOTED OTHERWISE.
3. DIVISION 26 SHALL PROVIDE 120 VOLT POWER WHERE INDICATED. DIV 26 SHALL PROVIDE EMPTY BOXES AND CONDUITS WITH PULL STRING U.N.O.

A1	ABBREVIATIONS	A3	LIGHTING	A5	RECEPTACLES	A7	POWER DISTRIBUTION	A9	SECURITY LEGEND
NONE		NONE		NONE		NONE		NONE	

Scale: 12" = 1'-0"

No.	Revision	By	Date

Designed by:

Catherine A. Faucher

ISSUED FOR BID

STATE OF MAINE — CATHERINE A. FAUCHER No. 7575 — LICENSED PROFESSIONAL ENGINEER

	By	Date		By	Date
Designed:	CAF	03/01/2022	Checked:	CAF	03/01/2022
Drawn:	PMC	03/01/2022			

Allied Engineering
Structural Mechanical Electrical Plumbing
160 Veranda Street
Portland, Maine 04103
P: 207.221.2260
F: 207.221.2266
Web:www.allied-eng.com

AEI PROJ.NO.: 21116 | CAD FILE: 20019S_R20.rvt

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

ELECTRICAL LEGEND

SHEET NUMBER: E000

CONTRACT: 2022.08

OH	OVERHEAD WIRING, TYPE AS INDICATED
	UNDERGROUND OR UNDERSLAB WIRING, TYPE AS INDICATED
	UTILITY POLE
	FUSED DISCONNECT SWITCH
	NON-FUSED DISCONNECT SWITCH
	MOTOR
	GROUNDING SYSTEM
J	JUNCTION BOX, WALL MOUNTED
J	JUNCTION BOX, IN-GROUND
M	ELECTRICAL MANHOLE, COORDINATE LOCATION WITH OTHER UNDERGROUND UTILITIES
T	PADMOUNT TRANSFORMER
PB	4'X6' PULL BOX WITH 32" COVER PLATE IN ACCORDANCE WITH UTILITY STANDARDS
P	PEDESTAL LOCATION, PEDESTAL BY SERVICE PROVIDER, STUB UP (2) 2" CONDUITS WITH CONNECTORS AND BUSHINGS FROM HANDHOLE
H	HANDHOLE, MINIMUM 18"x36"x24", SIZE PER NEC FOR NUMBER OF CONDUITS INSTALLED
M	METER & CT CABINET, PEDESTAL MOUNTED
	SINGLE POLE MOUNTED LIGHT
	DOUBLE POLE MOUNTED LIGHT
	WALL MOUNTED LIGHT FIXTURE
BL	EMERGENCY BLUE LIGHT CALL BOX STATION
EVSE	ELECTRIC VEHICLE DUAL CHARGING STATION POST
	SINGLE POLE HOMERUN: (2)#12+(1)#12G UNO, CONNECT TO PANEL INDICATED
	SINGLE-PHASE HOMERUN OR MULTIPLE HOMERUN UTILIZING THE SAME CONDUIT, CONNECT TO PANEL INDICATED
	3-PHASE HOMERUN OR MULTIPLE HOMERUN UTILIZING THE SAME CONDUIT, CONNECT TO PANEL INDICATED
A1 / ES-000	DETAIL CALL-OUT
A1 / ES-000	SECTION/ELEVATION CALL-OUT

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BAS	BUILDING AUTOMATION SYSTEM
CATV	CABLE TV
CB	CIRCUIT BREAKER
P/O	PART OF
MT	MOUNT
NEC	NATIONAL ELECTRICAL CODE
TEL	TELEPHONE
UNO	UNLESS NOTED OTHERWISE
WP	WEATHERPROOF
WG	WIREGUARD

(E)	EXISTING ITEM TO REMAIN
(R)	REMOVE ITEM AND DISPOSE OF PROPERLY
(ER)	RELOCATED ITEM AT NEW LOCATION
(RL)	REMOVE AND RELOCATE

A1 ELECTRICAL SITE LEGEND

Scale: AS NOTED

No.	Revision	By	Date

Designed by: Catherine Faucher, P.E.

ISSUED FOR BID

STATE OF MAINE CATHERINE A. FAUCHER No. 7573 REGISTERED PROFESSIONAL ENGINEER

	By	Date		By	Date
Designed:	CAF	03/01/2022	Checked:	CAF	03/01/2022
Drawn:	REW	03/01/2022			

Allied Engineering
Structural Mechanical Electrical Plumbing
160 Veranda Street
Portland, Maine 04103
P: 207.221.2260
F: 207.221.2266
Web:www.allied-eng.com

AEI PROJ.NO.: 21116 CAD FILE:21116_ES.dwg

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

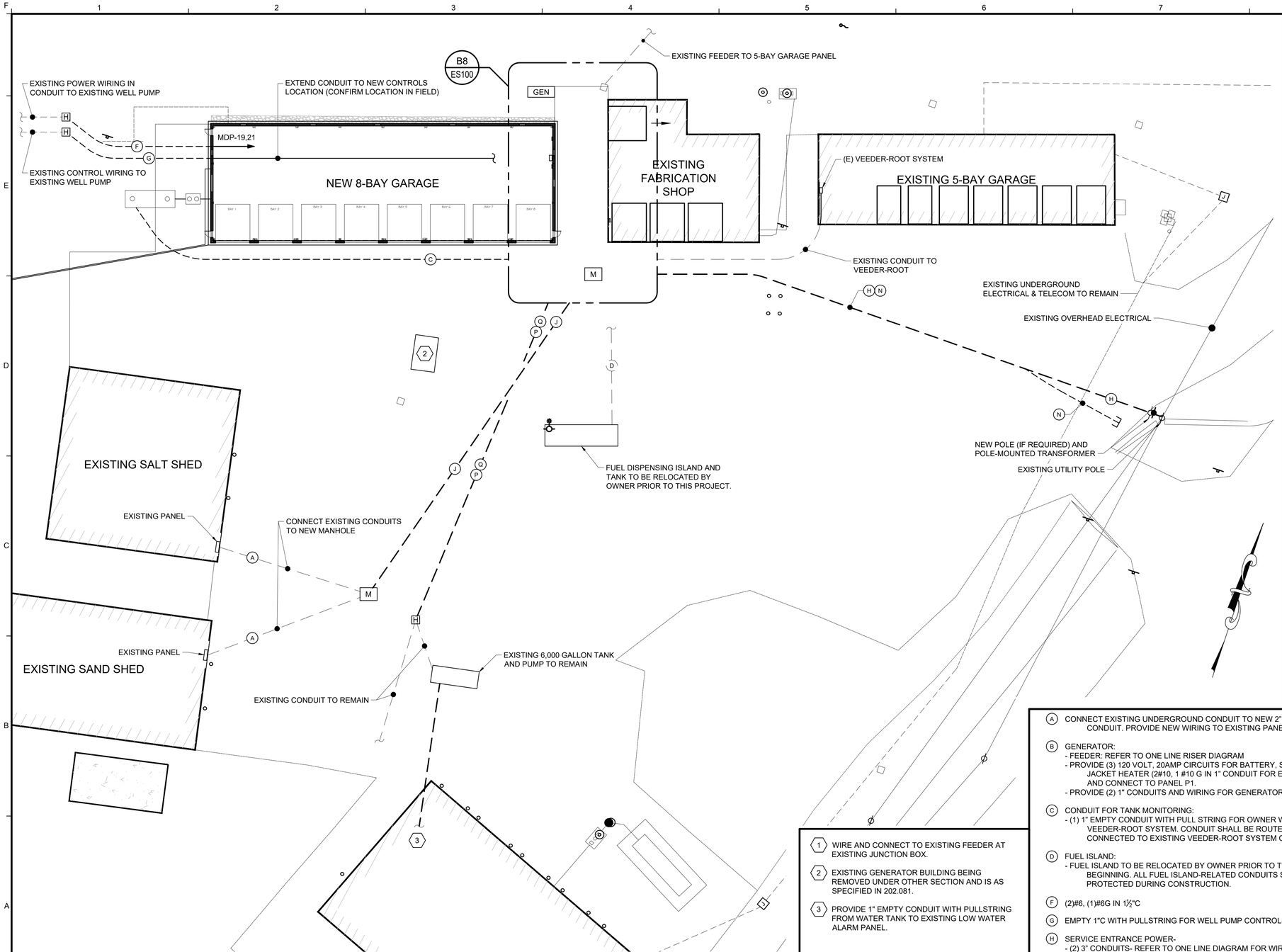
MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

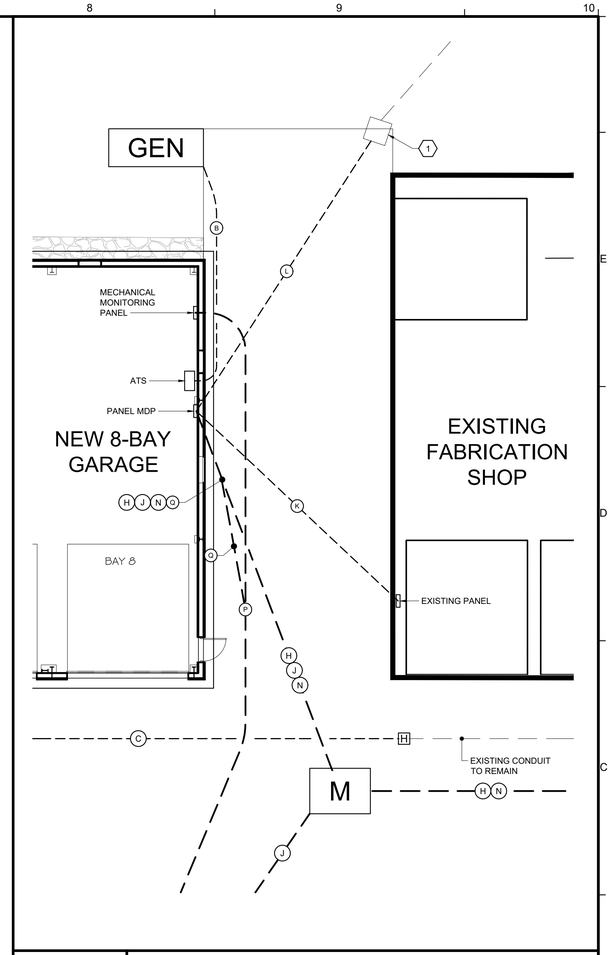
LITCHFIELD 8-BAY GARAGE REPLACEMENT

ELECTRICAL SITE LEGEND AND DETAILS

SHEET NUMBER: ES000

CONTRACT: 2022.08





B8	DETAIL
SCALE: 1"=10'	

1. WIRE AND CONNECT TO EXISTING FEEDER AT EXISTING JUNCTION BOX.
2. EXISTING GENERATOR BUILDING BEING REMOVED UNDER OTHER SECTION AND IS AS SPECIFIED IN 202.081.
3. PROVIDE 1" EMPTY CONDUIT WITH PULLSTRING FROM WATER TANK TO EXISTING LOW WATER ALARM PANEL.

A1	ELECTRICAL SITE PLAN
SCALE: 1"=25'	

C9 KEYNOTES

(A) CONNECT EXISTING UNDERGROUND CONDUIT TO NEW 2" UNDERGROUND CONDUIT. PROVIDE NEW WIRING TO EXISTING PANEL.

(B) GENERATOR:
- FEEDER: REFER TO ONE LINE RISER DIAGRAM
- PROVIDE (3) 120 VOLT, 20AMP CIRCUITS FOR BATTERY, STRIP HEATER AND JACKET HEATER (2#10, 1 #10 G IN 1" CONDUIT FOR EACH CIRCUIT. WIRE AND CONNECT TO PANEL P1.
- PROVIDE (2) 1" CONDUITS AND WIRING FOR GENERATOR CONTROLS.

(C) CONDUIT FOR TANK MONITORING:
- (1) 1" EMPTY CONDUIT WITH PULL STRING FOR OWNER WIRING TO VEEDER-ROOT SYSTEM. CONDUIT SHALL BE ROUTED FROM TANK AND CONNECTED TO EXISTING VEEDER-ROOT SYSTEM CONDUIT AS SHOWN.

(D) FUEL ISLAND:
- FUEL ISLAND TO BE RELOCATED BY OWNER PRIOR TO THIS PROJECT BEGINNING. ALL FUEL ISLAND-RELATED CONDUITS SHALL REMAIN AND BE PROTECTED DURING CONSTRUCTION.

(F) (2)#6, (1)#6G IN 1½"C

(G) EMPTY 1"C WITH PULLSTRING FOR WELL PUMP CONTROLS- WIRING BY OTHERS

(H) SERVICE ENTRANCE POWER-
- (2) 3" CONDUITS- REFER TO ONE LINE DIAGRAM FOR WIRING.

(J) SAND SHED AND SALT SHED FEEDER-
- (2) 1-1/2" CONDUITS- REFER TO ONE LINE DIAGRAM FOR WIRING.

(K) FABRICATION SHOP FEEDER-
- (1) 2" CONDUIT- REFER TO ONE LINE DIAGRAM FOR WIRING.

(L) 5 BAY GARAGE FEEDER-
- (1) 2" CONDUIT- REFER TO ONE LINE DIAGRAM FOR WIRING. CONNECT TO EXISTING FEEDER AS INDICATED.

(N) SPARE CONDUITS TO FUTURE BUNKHOUSE-
- (2) EMPTY 2" CONDUIT WITH PULL STRING.

(P) PUMP CONTROLS/ALARMS-
- (2) EMPTY 1" CONDUITS WITH PULL STRING. WIRING BY OTHERS.

(Q) PUMP POWER-
- (1) 1"C WITH (2)#6+(1)#10G

A9 CONDUIT KEY

Scale: AS NOTED

No.	Revision	By	Date

Designed by: Catherine Faucher, P.E.

ISSUED FOR BID

STATE OF MAINE — CATHERINE A. FAUCHER No. 7575 — LICENSED PROFESSIONAL ENGINEER

	By	Date		By	Date
Designed:	CAF	03/01/2022	Checked:	CAF	03/01/2022
Drawn:	REW	03/01/2022			

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Structural Mechanical Electrical Plumbing
160 Veranda Street
Portland, Maine 04103
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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

ELECTRICAL SITE PLAN

SHEET NUMBER: ES100

CONTRACT: 2022.08

VOLTAGE DROP CHART			
MAXIMUM LOAD (VA)	MAXIMUM LENGTH PER CONDUCTOR SIZE		
	#12	#10	#8
120 VOLT CIRCUITS			
800	155	245	390
1000	125	195	310
1200	105	165	260
1400	90	140	220
1600	80	125	195
1800	70	110	175
277 VOLT CIRCUITS			
2000	330	525	830
2500	265	420	665
3000	220	350	555
3500	190	300	475
4000	165	260	415

BRANCH CIRCUITS SCHEDULE	
CIRCUIT BREAKER	CONDUCTOR
120 OR 277 VOLT, 1 PH., 2W CIRCUITS	
15A-1P, 20A-1P	2#12 & 1#12 GND - 3/4" C.
30A-1P	2#10 & 1#10 GND - 3/4" C.
40A-1P	2#8 & 1#10 GND - 3/4" C.
50A-1P	2#6 & 1#10 GND - 3/4" C.
60A-1P	2#6 & 1#10 GND - 3/4" C.
208 OR 480 VOLT, 1PH., 2W CIRCUITS	
15A-2P, 20A-2P	2#12 & 1#12 GND - 3/4" C.
30A-2P	2#10 & 1#10 GND - 3/4" C.
40A-2P	2#8 & 1#10 GND - 3/4" C.
50A-2P	2#6 & 1#10 GND - 3/4" C.
60A-2P	2#6 & 1#10 GND - 3/4" C.
208 OR 480 VOLT, 3PH., 3W CIRCUITS	
15A-3P, 20A-3P	3#12 & 1#12 GND - 3/4" C.
30A-3P	3#10 & 1#10 GND - 3/4" C.
40A-3P	3#8 & 1#10 GND - 3/4" C.
50A-3P	3#6 & 1#10 GND - 3/4" C.
60A-3P	3#6 & 1#10 GND - 3/4" C.

BRANCH CIRCUIT SCHEDULE NOTES:

1. TYPE MC CABLE SHALL INCLUDE FULL SIZE INSULATED GROUND CONDUCTOR. SIZES AS INDICATED IN SCHEDULE
2. WIRING BASED ON MAXIMUM FEEDER LENGTH OF 150 FEET FOR 120 VOLT CIRCUITS AND 300 FEET FOR 277...
3. UPGRADE WIRE AND CONDUIT SIZE AS REQUIRED TO ADDRESS VOLTAGE DROP

SPECIAL RECEPTACLE SCHEDULE				
TAG	NEMA	DESCRIPTION (SINGLE DEVICE)	OCPD	BRANCH CIRCUIT
A	5-15R	15A-125V,2P,3W	15A-1P	2#12 & 1#12GND - 3/4" C
B	5-20R	20A-125V,2P,3W	20A-1P	2#12 & 1#12GND - 3/4" C
C	5-30R	30A-125V,2P,3W	30A-1P	2#10 & 1#10GND - 3/4" C
D	5-50R	50A-125V,2P,3W	50A-1P	2#6 & 1#10GND - 3/4" C
E	6-20R	20A-250V,2P,3W	20A-2P	2#12 & 1#12GND - 3/4" C
F	L6-20R	20A-250V,2P,3W	20A-2P	2#12 & 1#12GND - 3/4" C
G	6-30R	30A-250V,2P,3W	30A-2P	2#10 & 1#10GND - 3/4" C
H	L6-50R	50A-250V,2P,3W-LOCKING	50A-2P	2#6 & 1#10GND - 3/4" C
I	14-20R	20A-125/250V,3P,4W	20A-2P	3#12 & 1#12GND - 3/4" C
J	14-30R	30A-125/250V,3P,4W	30A-2P	2#10 & 1#10GND - 3/4" C
K	14-50R	50A-125/250V,3P,4W	50A-2P	3#6 & 1#10GND - 1" C
L	14-60R	60A-125/250V,3P,4W	60A-2P	3#6 & 1#10GND - 1" C
M	L15-20R	20A-250V,3PH,3P,4W	20A-3P	3#12 & 1#12GND - 3/4" C
N	15-30R	30A-250V,3PH,3P,4W	30A-3P	3#10 & 1#10GND - 3/4" C
P	15-50R	50A-250V,3PH,3P,4W	50A-3P	3#6 & 1#10GND - 1" C
Q	15-60R	60A-250V,3PH,3P,4W	60A-3P	3#6 & 1#10GND - 1" C
R	L5-20R	20A-125V,2P,3W, TWIST LOCK	20A-1P	2#12 & 1#12GND - 3/4" C
S	L5-30R	30A-125V,2P,3W, TWIST LOCK	30A-1P	2#10 & 1#10GND - 3/4" C
T	L6-15R	15A-250V,2P,3W, TWIST LOCK	15A-2P	2#12 & 1#12GND - 3/4" C
U	L6-20R	20A-250V,2P,3W, TWIST LOCK	20A-2P	2#12 & 1#12GND - 3/4" C
V	L6-30R	30A-250V,2P,3W, TWIST LOCK	30A-2P	2#10 & 1#10GND - 3/4" C
W	L14-20R	20A -125/250V,3P,4W,TWIST LOCK	20A-2P	3#12 & 1#12GND - 3/4" C
X	L14-30R	30A -125/250V,3P,4W,TWIST LOCK	30A-2P	3#10 & 1#10GND - 3/4" C
Y	L16-20R	20A-480V, 3P,4W, TWIST LOCK	20A-3P	3#12 & 1#12GND - 3/4" C
Z	L11-20R	20A-250V, 3P,4W, TWIST LOCK	20A-3P	3#12 & 1#10GND - 3/4" C

A1 | ELECTRICAL SCHEDULES

Scale:

No.	Revision	By	Date

Designed by:

Catherine A. Faucher

ISSUED FOR BID

STATE OF MAINE
CATHERINE A. FAUCHER
No. 7575
LICENSED PROFESSIONAL ENGINEER

	By	Date		By	Date
Designed:	CAF	03/01/2022	Checked:	CAF	03/01/2022
Drawn:	PMC	03/01/2022			

Allied Engineering
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Portland, Maine 04103
P: 207.221.2260
F: 207.221.2266
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AEI PROJ.NO.: 21116 | CAD FILE: 20019S_R20.rvt

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

ELECTRICAL GENERAL NOTES AND SCHEDULES

SHEET NUMBER: E001

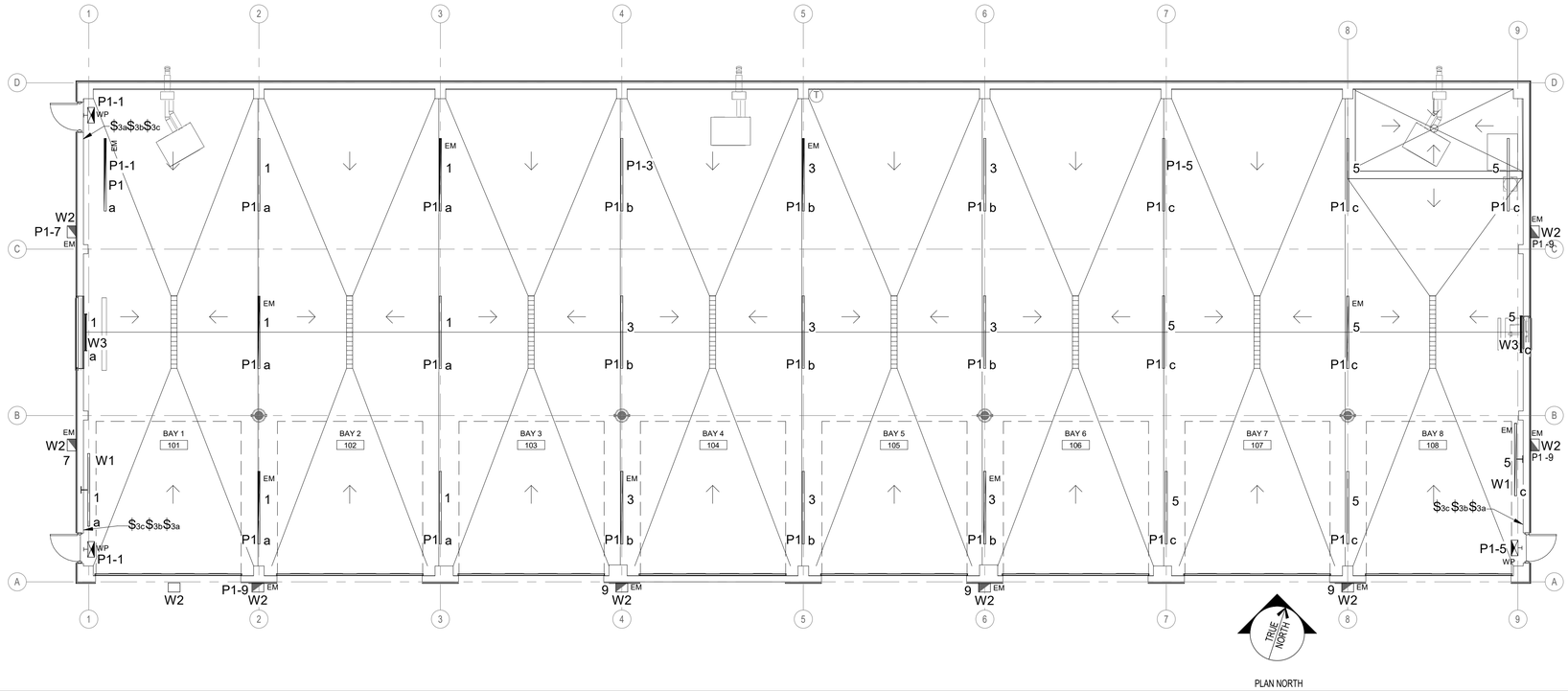
CONTRACT: 2022.08

LUMINAIRE SCHEDULE- KEY NOTE 1,2

TYPE	DESCRIPTION	MFR	CATALOG SERIES NUMBER - SEE KEY NOTE 1	MOUNTING	VOLTS	LAMP/LIGHT ENGINE			KEY NOTES
						WATTS	DELIVERED LUMENS	TYPE	
P1	8' PENDANT	STARTEK	SPW8S	PENDANT 16' AFF	120V	87	12540	LED 3500K	4,5
W1	WALL MOUNT VERSION OF P1			WALL 16' AFF				LED 4000K	4
W2	EXTERIOR WALL MOUNT	MCGRAW EDISON	GWC-AF-01-LED-E1-T4W	WALL 17' AFF	120V	67	7084	LED 4000K	6
W3	4' WALL MOUNT	STARTEK	SSF-4	MOUNT 7'-6" AFF	120V	47	6846	LED 4000K	4
	EXIT LIGHT	SURELITES	LPX		120VAC/ 12VDC	1		LED	3

KEY NOTES

1	**NOTE THAT THESE NUMBERS ARE NOT COMPLETE CATALOG NUMBERS. PROVIDE ALL REQUIREMENTS ON SCHEDULE, NOTES, SPECS, AND DRAWINGS COMBINED.**
2	VERIFY CEILING STRUCTURE AND MOUNTING HEIGHT PRIOR TO ORDERING ANY LIGHT FIXTURES.
3	PROVIDE WALL,CEILING, OR PENDANT MOUNTING AS INDICATED ON PLANS. PROVIDE NUMBER OF FACES AND ARROWS AS INDICATED.
4	PROVIDE SMOOTH POLYCARBONATE LENS
5	PROVIDE RIGID STEMS FOR PENDANT MOUNTED FIXTURE.
6	PROVIDE INTEGRAL PHOTOCELL AND MOTION SENSOR THAT WILL BE AUTO ON/AUTO OFF VIA MOTION SENSOR ONLY AFTER DUSK



A1	LIGHTING PLAN
1/8" = 1'-0"	

Scale: 1/8" = 1'-0"

No.	Revision	By	Date

Designed by: Catherine A. Faucher

ISSUED FOR BID

STATE OF MAINE · CATHERINE A. FAUCHER No. 7575 · LICENSED PROFESSIONAL ENGINEER

	By	Date		By	Date
Designed:	CAF	03/01/2022	Checked:	CAF	03/01/2022
Drawn:	PMC	03/01/2022			

Allied Engineering
Structural Mechanical Electrical Plumbing
160 Veranda Street
Portland, Maine 04103
P: 207.221.2260
F: 207.221.2266
Web:www.allied-eng.com

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

LIGHTING PLAN

SHEET NUMBER: EL100

CONTRACT: 2022.08

ELECTRICAL SCHEDULE OF MECHANICAL EQUIPMENT- REFER TO PANEL SCHEDULES FOR CIRCUITING

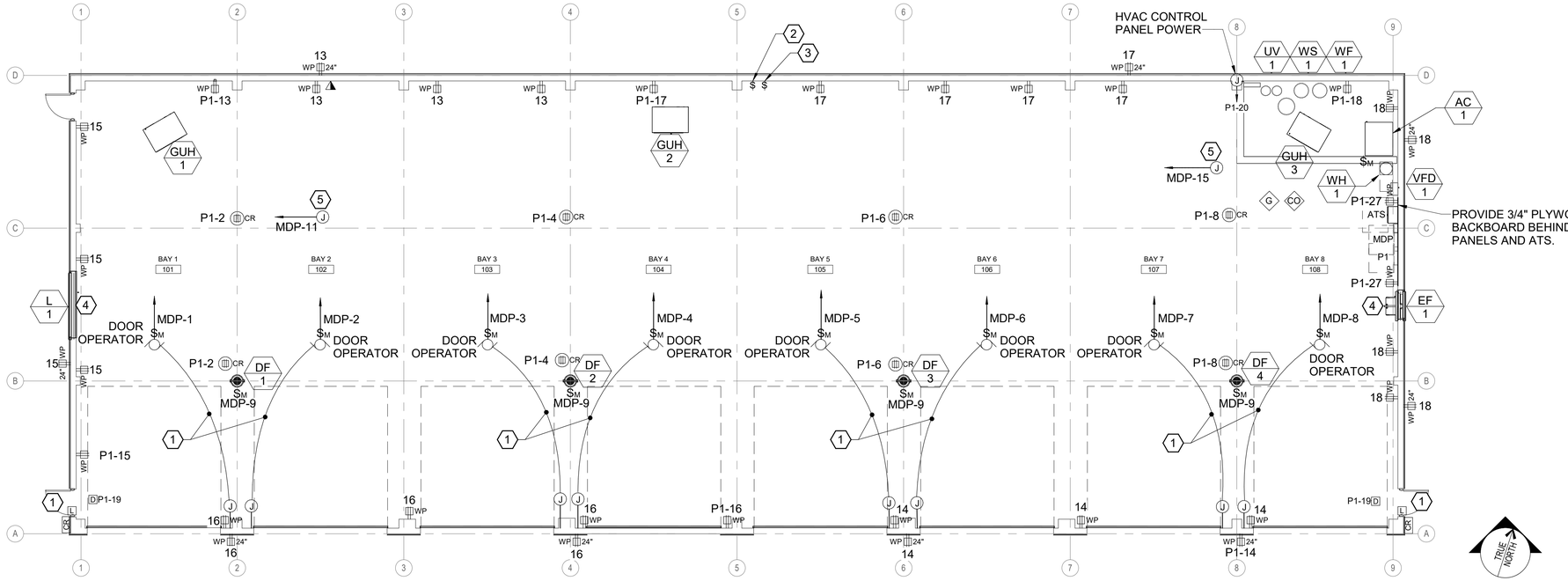
TAG	DESCRIPTION/ AREA SERVED	VOLTS	PH	LOAD	FLA	MCA	MOPD	DISCONNECT SWITCH					STARTER (NEMA)		CBD	WIRING IN CONDUIT (2 #12, 1#12 G UNO)	NOTES
								FRAME	POLES	FUSE	NEMA...	FBD	SIZE/...	FBD			
AC-1	AIR COMPRESSOR	240	1	7.5 HP	40	46	80	FWE				22		22	22	3 #4 , 1 #8G	
GUH-1	BLOWER HEATER	120	1	.5 hp	9.8		20	FWE				23		23	23	3 #12, 1 #12G	
GUH-2	BLOWER HEATER	120	1		9.8		20	FWE				23		23	23	3 #12, 1 #12G	
GUH-3	BLOWER HEATER	120	1		9.8		20	FWE				23		23	23	3 #12, 1 #12G	
DF-1,2,3,4	DESTRATIFICATION FANS	120	1	106W	1.0		15	MRT				26		23	23	3 #12, 1 #12G	
EF-1	EXHAUST FAN	240	1	3 HP	17.0		30	FWE				23		23	23	4#10, 1 #10G	1,2
WH-1	ELECTRIC WATER HEATER	120	1	1650W	14.0		20	MRT				23		23	23	3 #12, 1 #12G	
L-1	INTAKE LOUVER	120	1		2.0		20	-				23		23	23	3#12, 1 #12G	1
UV-1	ULTRAVIOLET WATER DISINFECTION	120	1	60W	0.5		20	FWE				23		23	23	3#12, 1 #12G	3
VFD-1	VFD FOR DOM. WATER PUMP CONTROL	240	1	4800W	20.0		40	FWE				23		23	23	3#8, 1 #10G	
WF-1	WATER FILTER SYSTEM	120	1		2.0		20	FWE				23		23	23	3#12, 1 #12G	3
WS-1	WATER SOFTNER SYSTEM	120	1		2.0		20	FWE				23		23	23	3#12, 1 #12G	3

NOTES:

1. LINE VOLTAGE CONTROL WIRING BY DIVISION 26, CONTROL DEVICES FURNISHED BY DIVISION 23. L-1/EF-1 SHALL BE INTERLOCKED. CONDUIT AND WIRING BETWEEN EXHAUST FAN, LOUVERS AND CONTROL DEVICES BY DIV 26.
2. VFD FURNISHED BY DIV 23 TO BE INSTALLED BY DIV 26
3. CORD AND PLUG FURNISHED WITH EQUIPMENT, PROVIDE NEMA 5-20 GFCI RECEPTACLE. COORDINATE EXACT LOCATION FOR RECEPTACLE IN FIELD.

ABBREVIATIONS:

FWE	FURNISHED WITH EQUIPMENT
NF	NOT FUSED
SWBD	SWITCHBOARD
FBD	FURNISHED BY DIVISION
CBD	CONTROL WIRING BY DIVISION
MRT	MOTOR RATED TOGGLE SWITCH (VOLTAGE, CURRENT RATING AND POLE QUANTITY AS REQUIRED)



KEYED NOTES:

1. PROVIDE EMPTY J-BOX 44" ABOVE FINISHED FLOOR AND 1-1/2" EMPTY CONDUIT FOR DOOR CONTROL WIRING AND CONTROLS BY OTHERS.
2. DESTRATIFICATION FAN DF-1 thru DF-4 MANUAL SPEED CONTROL-CONTROLS BY OTHERS
3. EXHAUST FAN EF-1/L-1 VENTILATION MANUAL CONTROL-CONTROLS BY OTHERS. CONDUIT AND WIRING BETWEEN EF-1/L-1 BY DIV. 26.
4. WIRE AND CONNECT MOTORIZED DAMPERS TO CIRCUIT MDP-20. COORDINATE CONTROL WITH DIV 23
5. PROVIDE 120 VOLT POWER FOR HVAC CONTROLS AT UNDERSIDE OF DECK. CONTROLS BY OTHERS.

A1 POWER AND SYSTEMS PLAN

1/8" = 1'-0"

Scale: 1/8" = 1'-0"

No.	Revision	By	Date

Designed by: Catherine A. Faucher

ISSUED FOR BID

CATHERINE A. FAUCHER No. 7575 LICENSED PROFESSIONAL ENGINEER STATE OF MAINE

	By	Date		By	Date
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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Brian A. Taddeo, P.E.

LITCHFIELD 8-BAY GARAGE REPLACEMENT

POWER AND SYSTEMS PLAN

SHEET NUMBER: EP100

CONTRACT: 2022.08

Lighting and Appliance Panelboard: P1

Location: BAY 8 108
Supply From: MDP
Mounting: Surface

Volts: 120/240 Single
Phases: 1
Wires: 3

A.I.C. Rating: 42kA
Mains Type: MLO
Bus Rating: 100 A
MCB Rating:

CKT	Circuit Description	Trip Amps	Poles	A (kVA)		B (kVA)		Poles	Trip Amps	Circuit Description	CKT
1	Lighting, Switch a	20	1	0.7	0.7			1	20	CORD REELS BAYS 1-2	2
3	Lighting, Switch b	20	1			0.8	0.7	1	20	CORD REELS BAYS 3-4	4
5	Lighting, Switch c	20	1	0.7	0.7			1	20	CORD REELS BAYS 5-6	6
7	EXTERIOR BUILDING LIGHTING	20	1			0.1	0.7	1	20	CORD REELS BAYS 7-8	8
9	EXTERIOR BUILDING LIGHTING	20	1	0.5	0.5			1	20	GENERATOR BATTERY CHARGER	10
11	GENERATOR START	20	1			0.5	1.4	1	20	GEN JACKET WH AND STRIP HEATER	12
13	Receptacles	20	1	0.9	0.9			1	20	Receptacles	14
15	Receptacles	20	1			0.9	1.1	1	20	Receptacles	16
17	Receptacles	20	1	1.1	1.1			1	20	Receptacles	18
19	DOOR POWER	20	1			0	0.5	1	20	HVAC CONTROL PANELS	20
21	SPARE	20	1	0	0			1	20	SPARE	22
23	SPARE	20	1			0	0	1	20	SPARE	24
25	SPARE	20	1	0	0			1	20	SPARE	26
27	Receptacle	20	1			0.4	0	1	20	SPARE	28
29	SPARE	20	1	0	0			1	20	SPARE	30
			Total Load:	6.7 kVA		6.4 kVA					
			Total Amp:	55 A		53 A					

Notes:

Lighting and Appliance Panelboard: MDP

Location: BAY 8 108
Supply From:
Mounting: Surface

Volts: 120/240 Single
Phases: 1
Wires: 3

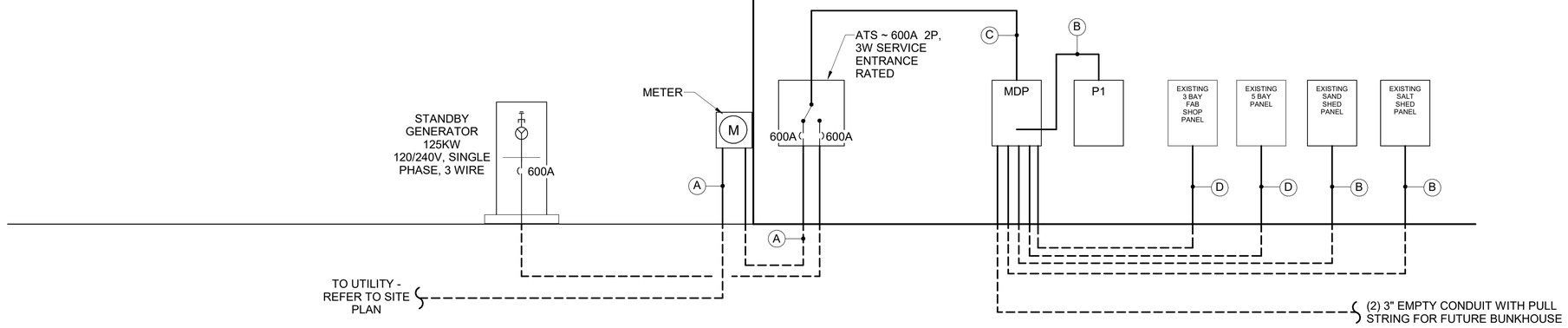
A.I.C. Rating: 42kA
Mains Type: MCB
Bus Rating: 600 A
MCB Rating: 600A

CKT	Circuit Description	Trip Amps	Poles	A (kVA)		B (kVA)		Poles	Trip Amps	Circuit Description	CKT
1	DOOR OPERATOR BAY 1	20	1	1.4	1.4			1	20	DOOR OPERATOR BAY 2	2
3	DOOR OPERATOR BAY 3	20	1			1.4	1.4	1	20	DOOR OPERATOR BAY 4	4
5	DOOR OPERATOR BAY 5	20	1	1.4	1.4			1	20	DOOR OPERATOR BAY 6	6
7	DOOR OPERATOR BAY 7	20	1			1.4	1.4	1	20	DOOR OPERATOR BAY 8	8
9	DESTRAT FANS	15	1	0.5	1.2			1	20	GAS UNIT HEATER 1	10
11	HVAC CONTROL POWER	20	1			0.5	1.2	1	20	GAS UNIT HEATER 2	12
13	WATER HEATER	20	1	1.7	1.2			1	20	GAS UNIT HEATER 3	14
15	HVAC CONTROL POWER	20	1			0.5	0.2	1	20	HVAC - WF-1	16
17	HVAC - UV-1	20	1	0.2	0.2			1	20	HVAC - WS-1	18
19	EXISTING WELL PUMP	30	2			1.8	0.2	1	20	HVAC - LOUVER POWER L-1	20
21				1.8	0			1	20	SPARE	22
23	HVAC - VFD-1 WATER PUMP	40	2			2.4	0	1	20	SPARE	24
25				2.4	0			1	20	SPARE	26
27	HVAC - EF-1 EXHAUST FAN	35	2			2.2	4.8	2	80	AC-1 AIR COMPRESSOR	28
29				2.2	4.8						30
31	SPARE	100	2			0	0	2	100	SPARE	32
33				0	0						34
35	EXISTING 3 BAY FAB SHOP PANEL	200	2			0	0	2	225	EXISTING 5 BAY PANEL	36
37				0	0						38
39	P2 PANEL	100	2			6.7	0	2	100	SPARE (BUNKHOUSE)	40
41				6.4	0						42
			Total Load:	28.3 kVA		26.1 kVA					
			Total Amp:	235 A		218 A					

Notes:

FEEDER SCHEDULE

TAG	DESCRIPTION	CONDUCTORS (NOTE 1)	CONDUIT (NOTE...
Ⓐ	600 AMP FEEDER	2 SETS OF (3) #350KCMIL	(2) 3"
Ⓑ	100 AMP FEEDER	(3) #2, (1) #8 G	1 1/2"
Ⓒ	600 AMP FEEDER	2 SETS OF (3) #350KCMIL, (1) #1 G	(2) 3"
Ⓓ	225 AMP FEEDER	(3) 4/0, (1) #4 G	2"
	FEEDER SCHEDULE NOTES:		
	1. WIRING BASED ON COPPER THWN/THHN		
	2. CONDUIT SIZE BASED ON EMT		



A1	POWER RISER DIAGRAM
NONE	

Scale: 12" = 1'-0"

No.	Revision	By	Date

Designed by:

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LITCHFIELD 8-BAY GARAGE REPLACEMENT

POWER RISER DIAGRAM

SHEET NUMBER: EP500

CONTRACT: 2022.08