

VILLAGE OF SUFFERN

61 WASHINGTON AVE, SUFFERN, NY 10901

NYS GOVERNOR'S OFFICE OF
STORM RECOVERY

GENERATOR REPLACEMENT VILLAGE HALL AND DPW GARAGE VILLAGE OF SUFFERN, ROCKLAND COUNTY, NEW YORK

New York Rising Community
Reconstruction Program



GOSR
Governor's Office of Storm Recovery

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CLIENT	VILLAGE OF SUFFERN
FILE #	50137469
DRAWN BY	R. ADIWINARSO
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DATE	05/21/2021
SCALE	AS INDICATED

SHEET #	T-1
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GENERAL NOTES:

- WORK SHALL COMPLY WITH THE LATEST VERSION OF THE NEW YORK STATE CODE, NATIONAL ELECTRICAL CODE, 2014 EDITION, THE REQUIREMENTS OF UNDERWRITERS LABORATORIES (UL), DASHY REQUIREMENTS AND REQUIREMENTS OF ALL AGENCIES HAVING JURISDICTION.
- INSTALLATION SHALL MEET ALL REQUIREMENTS OF THE 2014 NEC ARTICLE 702 OPTIONAL STANDBY SYSTEMS INCLUDING SIGNS AT EACH SERVICE-ENTRANCE EQUIPMENT.
- WORK SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND NECESSARY SERVICES TO FURNISH AND INSTALL ALL ELECTRICAL WORK AS INDICATED ON THE DRAWINGS AND THE SPECIFICATIONS. THE WORD "PROVIDE", SHALL MEAN FURNISHING AND INSTALLATION OF THE ITEMS INDICATED. ALL ITEMS SHOWN ARE NEW UNLESS OTHERWISE NOTED. THE PROJECTS WILL BE A SINGLE PRIME ELECTRICAL CONTRACT. THE ELECTRICAL PRIME CONTRACTOR WILL SUBCONTRACT NON-ELECTRICAL WORK NOT PERFORMED BY THEM TO INCLUDE THE GENERAL CONSTRUCTION. THE PRIME CONTRACTOR AND ALL SUB-CONTRACTORS SHALL BE LICENSED IN THE LOCAL JURISDICTIONS, WITH THE AUTHORITIES HAVING JURISDICTIONS, IN THEIR RESPECTIVE TRADE OF WORK.
- ELECTRICAL CONTRACTOR AND HIS SUB-CONTRACTORS ARE ENCOURAGED TO VISIT ALL SITES PRIOR TO SUBMITTING THEIR BIDS AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS THAT MAY AFFECT THEIR WORK AND SHALL NOT BE ENTITLED FOR ANY ADDITIONAL COMPENSATION DUE TO THEIR FAILURE TO DO SO. ALL SITE VISITS SHALL BE COORDINATED THROUGH THE VILLAGE OF SUFFERN.
- CONTRACTOR SHALL, IN A WORKMANLIKE MANNER, PROVIDE A COMPLETE OPERABLE SYSTEM.
- MINIMUM SIZE OF RACEWAY FOR POWER CIRCUITS SHALL BE 3/4" CONDUIT, U.O.N. PROVIDE FLEXIBLE SEALTIGHT CONDUITS FOR FINAL CONNECTIONS TO GENERATORS.
- MINIMUM WIRE SIZE FOR POWER CIRCUITS SHALL BE #12 AWG, TYPE THWN/THHN/THWN-2, UON.
- UNLESS OTHERWISE NOTED, PULL AND JUNCTION BOXES WHERE INDICATED ON DRAWINGS, SHALL BE CONSIDERED SHOWN AT THEIR APPROXIMATE LOCATION. THE CONTRACTOR SHALL LOCATE THEM AS FIELD CONDITIONS DICTATE. ADDITIONAL PULL AND JUNCTION BOXES NOT SHOWN ON DRAWINGS SHALL BE PROVIDED WHERE REQUIRED BY APPLICABLE CODE PROVISIONS OR FIELD CONDITIONS.
- CONTRACTOR TO PROVIDE PULLBOXES FOR ALL CONDUIT RUNS EXCEEDING 270 DEGREES IN BENDS PER NEC AND AS REQUIRED SO AS NOT TO EXCEED THE MANUFACTURER'S CABLE PULLING TENSION WHETHER OR NOT INDICATED ON DRAWINGS.
- EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT & RACEWAYS SHALL BE GROUNDED. THE CONTRACTOR SHALL ENSURE CONTINUITY OF THE GROUNDING CIRCUIT THROUGH THIS GROUNDING CONDUCTOR FROM THE SUPPLYING PANELBOARD GROUNDING BUS TO THE LOAD GROUND TERMINAL. THE ELECTRICAL SYSTEM SHALL BE GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
- ARCHITECTURAL FEATURES AS WELL AS MECHANICAL EQUIPMENT SHOWN ON ELECTRICAL DRAWINGS ARE FOR BACKGROUND INFORMATION ONLY.
- ALL WORK SHOWN ON THE DRAWINGS NOT SPECIFICALLY CALLED OUT AS EXISTING SHALL BE CONSIDERED WORK TO BE PERFORMED UNDER THIS CONTRACT.
- ALL CONDUIT RUNS IN THIS CONTRACT ARE DIAGRAMMATIC. LOCATION OF EQUIPMENT AND RUNS MAY VARY DUE TO PHYSICAL CONDITIONS. THE WORK SHALL INCLUDE ALL REQUIRED PULL & JUNCTION BOXES TO COMPLETE THE CONDUIT INSTALLATION. CONTRACTOR SHALL INSTALL EQUIPMENT AND CONDUITS IN A MANNER TO MINIMIZE ANY INTERFERENCE WITH OTHER CONTRACTS OR TRADES.
- CONDUIT ROUTING SHOWN IS SCHEMATIC. CONTRACTOR SHALL ADJUST ROUTING TO SUIT FIELD CONDITIONS. ANY CHANGES TO PROPOSED ROUTING LOCATIONS SHALL BE INDICATED IN PROVIDED SHOP DRAWINGS BY CONTRACTOR FOR REVIEW AND APPROVAL.
- DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED. SUBCONTRACTOR SHALL PROVIDE ALL MATERIALS NECESSARY TO INSURE A COMPLETE INSTALLATION INCLUDING, BUT NOT LIMITED TO RACEWAYS, BENDS, FITTINGS, BOXES, TRENCHING, ETC. WHERE AN ELECTRICAL DEVICE IS REQUIRED BY CODE BUT NOT SHOWN, IT SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR ALL LUG KITS/COPPER BUS DETAILS AS REQUIRED FOR OVER SIZED FEEDERS. LUGS SHALL BE COPPER-PRESSURE PLATE TYPE, UP TO NO. 6 & COMPRESSION TYPE FOR LARGER SIZE CONDUCTOR.
- THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH SUB-CONTRACTORS AND OTHER TRADES.
- SECURE PERMITS AND INSPECTION CERTIFICATES AND TRANSMIT SAME TO THE OWNER AT THE COMPLETION OF THE WORK. VILLAGE OF SUFFERN IS THE PERMITTING AGENCY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FILING ALL DOCUMENTS WITH ALL LOCAL AGENCIES AND COORDINATION WITH THE LOCAL UTILITY. VILLAGE OF SUFFERN IS THE PERMITTING AGENCY.
- PATCH AND REPAIR ALL SURFACES DAMAGED BY TRENCHING TO MATCH EXISTING.
- PROVIDE SIGNAGE FOR OPTIONAL STANDBY POWER SOURCES AS REQUIRED BY NEC 702.8. ALL SIGNS SHALL BE ENGRAVED LAMINATED PLASTIC WITH MINIMUM 1/2" HIGH LETTERS.
- MAINTAIN A MINIMUM OF 5 FEET OF CLEARANCE FROM BUILDING AND 10 FEET FROM PROPERTY LINE, FROM THE GENERATOR.
- ANY FEES/CHARGES IMPOSED BY THE UTILITY TO INSTALL THE GENERATORS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL PENETRATIONS SHALL BE SEALED TO REMAIN RAIN-TIGHT.
- REFER TO THE ONE-LINE WIRING SCHEMATIC FOR CONDUCTOR SIZES BETWEEN MAJOR POWER COMPONENTS OF THE ELECTRICAL SYSTEM.
- SUBCONTRACTOR SHALL LAY OUT RUNS TO SUIT FIELD CONDITIONS AND THE COORDINATION REQUIREMENTS OF OTHER TRADES. SUB-CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS OF DEVIATIONS TO DESIGNED ROUTING OF NEW CONDUITS FOR REVIEW AND APPROVAL.
- ALL CONDUIT RUNS SHALL BE SECURELY FASTENED AT INTERVALS OF 10 FT. MAX. AND 3 FT. MAX. FROM EQUIPMENT OR STRUCTURE PENETRATIONS PER NEC 358.30.
- ALL RGS CONDUIT RUNS SHALL BE SECURELY FASTENED WITHIN 3 FT. OF TERMINATIONS PER NEC 344.30 AND SUPPORTED AT 10 FT. MAX INTERVALS OR IN ACCORDANCE WITH NEC TABLE 344.30.
- CONDUIT ENTRY/CONNECTION TO ELECTRICAL ENCLOSURES SHALL BE SUITABLE FOR GROUNDING AND SHALL BE SEALED AGAINST ENVIRONMENT, SUCH AS WATER, INSECTS AND RODENTS. CONDUIT SHALL NOT ENTER FROM TOP OF ELECTRICAL EQUIPMENT IN OUTDOOR LOCATIONS WITHOUT SITE-SPECIFIC APPROVAL FROM ENGINEER VIA RFI PROCESS. IF GRANTED APPROVAL FOR TOP ENTRY, ONLY RIGID CONDUIT TO OUTDOOR EQUIPMENT WITH MEYERS HUBS TO BE USED.
- ALL NEW EQUIPMENT TO HAVE AN AIC RATING GREATER THAN OR EQUAL TO THAT OF THE EXISTING EQUIPMENT UNLESS OTHERWISE NOTED.
- UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 80 CONDUITS AND ABOVE GROUND OUTDOOR EXPOSED CONDUITS SHALL BE RIGID GALVANIZED STEEL CONDUITS (RGS), UON ON PLANS. PROVIDE PVC TO RGS CONDUIT COUPLING FOR TRANSITION FROM UNDERGROUND TO ABOVEGROUND CONDUIT RUNS. INDOOR CONDUITS MAY BE RGS OR EMT, U.O.N ON PLANS.
- CONTRACTOR MUST VERIFY EXISTING CIRCUITS AND BREAKER SIZES IN THE FIELD AND SUBMIT THEM TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
- PROVIDE ALL REQUIRED JUNCTION BOXES, PULL BOXES, FASTENERS, HANGERS SUPPORTS, BRACKETS OR OTHER ACCESSORIES REQUIRED AND NECESSARY FOR PROPER SUPPORT OF ELECTRICAL CONDUIT AND EQUIPMENT.
- ALL CONTRACTORS AND SUBCONTRACTORS SHALL NOTIFY IMMEDIATELY IF SUSPECT MOLD GROWTH IS DISCOVERED ON SURFACES TO BE IMPACTED DURING THE PROJECT. NO DISTURBANCE TO THESE SURFACES SHALL OCCUR UNTIL ADDRESSES THE SITUATION AND DETERMINES THE PROPER COURSE OF ACTION TO TAKE.
- PROVIDE FIRE STOPPING FOR ALL FIRE RATED FLOORS AND WALLS PENETRATION.

OPTIONAL STANDBY GENERATOR AND ATS SCHEDULE

SYMBOL	LOCATION	EQUIPMENT DESCRIPTION	FUEL TYPE	MANUFACTURER & MODEL NUMBER	SYMBOL	AUTOMATIC TRANSFER SWITCH
G1	VILLAGE HALL VILLAGE OF SUFFERN (BID ALTERNATE NO. 1)	STANDBY NATURAL GAS GENERATOR SET. 175KW, 208/120VAC, 3PH, 4W, 60HZ, WITH 800A, 100% RATED MAIN THERMAL MAGNETIC CIRCUIT BREAKER, BATTERY, BATTERY CHARGER, LEVEL 2 ACOUSTIC ENCLOSURE AND LOAD CENTER.	NATURAL GAS PRESSURE: 7"-11" H2O	GENERAC INDUSTRIAL POWER: SG175, 14.2L (OR APPROVED EQUAL)	ATS-1	AUTOMATIC TRANSFER SWITCH, 1000A, 208/120VAC, 3PH, 4W, 60HZ, OPEN TRANSITION, 3 POLE, SOLID NEUTRAL. GENERAC, MODEL: PSTS1000 OR EQUAL.
G2	SUFFERN DPW GARAGE	STANDBY NATURAL GAS GENERATOR SET. 50KW, 208/120VAC, 3PH, 4W, 60HZ, WITH 225A, 100% RATED MAIN THERMAL MAGNETIC CIRCUIT BREAKER, BATTERY, BATTERY CHARGER, LEVEL 2 ACOUSTIC ENCLOSURE AND LOAD CENTER.	NATURAL GAS PRESSURE: 7"-11" H2O	GENERAC INDUSTRIAL POWER: SG050, 5.4L (OR APPROVED EQUAL)	ATS-2	AUTOMATIC TRANSFER SWITCH, 225A, SERVICE ENTRANCE RATED, 208/120VAC, 3PH, 4W, 60HZ, WITH 225A MAIN CIRCUIT BREAKER. OPEN TRANSITION, 3 POLE, SOLID NEUTRAL. NEMA 4X ENCLOSURE. GENERAC, MODEL: PSTS225 OR EQUAL.

GENERAL SITE WORK NOTES (CAUTION TO CONTRACTOR):

- CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING UNDERGROUND UTILITIES (MARKUP) IN AREAS TO BE TRENCHED AND GENERATOR LOCATION. VERIFY EXACT ROUTING IN FIELD PRIOR TO ANY EXCAVATION WORK. HAND EXCAVATION MAY BE REQUIRED DUE TO EXISTING UNDERGROUND UTILITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INVESTIGATING AND VERIFYING THE ACTUAL LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND FACILITIES IN ADVANCE OF THE PERFORMANCE OF ANY WORK. ANY EXISTING UTILITIES THAT ARE DAMAGED BY THE CONTRACTOR'S WORK SHALL BE REPAIRED AT CONTRACTOR'S COST WHETHER OR NOT UTILITIES ARE INDICATED ON PLANS.
- RESTORE ALL PAVEMENT, SIDEWALK AND LANDSCAPE EXCAVATED TO ORIGINAL CONDITION. THE EXTEND OF RESTORATION IS NOT LIMITED TO WHAT IS SHOWN ON PLANS. RESTORE ALL SURFACES DISTURBED DURING EXCAVATION TO ORIGINAL CONDITION. PROVIDE SODDING FOR ENTIRE GRASS AREAS DISTURBED DURING TRENCHING AND RESTORATION.
- CONTRACTOR MUST HIRE AND PAY FOR AN INDEPENDENT UNDERGROUND UTILITY MARKUP COMPANY FOR IDENTIFICATION OF ALL EXISTING UNDERGROUND UTILITIES, CONDUITS, PIPING, SANITARY WELLS, ETC. IN THE PROPERTY AND STREET AS REQUIRED, BEFORE ANY EXCAVATION AND TRENCHING WORK. IN ADDITION CONTRACTOR MUST CALL DIG SAFELY NEW YORK AT (811) OR 1-800-272-4480 FOR IDENTIFICATION OF ALL UNDERGROUND PUBLIC UTILITIES AS REQUIRED. SUBMIT RESULTS FOR EACH SITE TO THE VILLAGE OF SUFFERN AND ENGINEER FOR REVIEW.

SYMBOLS:

	DRAWING PLAN KEY NOTE SYMBOL.
	AUTOMATIC TRANSFER SWITCH. # AS SHOWN ON ATS SCHEDULE
	CHAIN LINK FENCE WITH POST (APPLIES ONLY FOR GENERATOR SITE PLANS)
	EXISTING CONDUIT/EQUIPMENT TO BE REMOVED
	EXISTING CONDUIT/EQUIPMENT TO REMAIN
	3/4" CONDUIT WITH 2#12 AWG & 1#12 GND COPPER WIRES, UON.
	EXISTING ELECTRIC METER
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
	GROUNDING CONDUCTOR SIZE PER NEC OR LARGER WHERE INDICATED
	CONDUIT END (CAPPED).
	TRENCH BETWEEN GENERATOR AND ROOM WITH AUTOMATIC TRANSFER SWITCH (ATS) - PART PLAN
	TRENCH BETWEEN GENERATOR SET AND ROOM WITH AUTOMATIC TRANSFER SWITCH (ATS)
	GFCI DUPLEX ELECTRICAL OUTLET, WITH A WEATHERPROOF BOX AND COVER PLATE
	JUNCTION BOX WITH FINAL EQUIPMENT CONNECTION.
	SURFACE MOUNTED ELECTRICAL PANEL
	EXISTING SURFACE MOUNTED ELECTRICAL PANEL
	DRAWING PLAN NOTE WITH LASSO.
	DRAWING PLAN NOTE WITH LEADER.
	PULL BOX, SPLICE BOX, SIZE AS REQUIRED

ONE LINE SYMBOLS:

	OPTIONAL STANDBY GENERATOR. SEE GENERATOR # ON SCHEDULE.
	AUTOMATIC TRANSFER SWITCH (ATS). RATING AS INDICATED. SEE ATS SCHEDULE.
	SERVICE RATED AUTOMATIC TRANSFER SWITCH (ATS) WITH INTEGRAL SERVICE DISCONNECT CIRCUIT BREAKER. SEE ATS SCHEDULE.
	CIRCUIT BREAKER AF - AMPERE FRAME AT - AMPERE TRIP
	GROUND ROD
	GROUND CONNECTION
	EXISTING ELECTRICAL PANEL TO REMAIN
	FACTORY PROVIDED LOAD CENTER WITHIN GENERATOR ENCLOSURE

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS ARE NECESSARILY USED IN THIS PROJECT.

ABBREVIATIONS:

A OR AM	AMPERE	JB	JUNCTION BOX
AC	ALTERNATING CURRENT	KCMIL	THOUSAND CIRCULAR MILS
AS/AF	AMP SWITCH/AMP FUSE	KVA	KILOVOLT AMPERE
AFF	ABOVE FINISHED FLOOR	KW	KILOWATT
AG	ABOVE GROUND/GRADE	MCB	MAIN CIRCUIT BREAKER
A.I.C.	AMPERE INTERRUPTING CAPACITY (RMS SYMMETRICAL AMPERES)	MAX	MAXIMUM
ATS-#	AUTOMATIC TRANSFER SWITCH. # AS SHOWN ON ATS SCHEDULE	MIN	MINIMUM
AUX	AUXILIARY	MLO	MAIN LUGS ONLY
AWG	AMERICAN WIRE GAUGE	(N)	NEW ITEM TO BE PROVIDED
BAS	BUILDING AUTOMATION SYSTEM	N	NEUTRAL
BLDG	BUILDING	NC	NORMALLY CLOSED
BDP	BUILDING DISTRIBUTION PANEL	NEC	NATIONAL ELECTRIC CODE
C	CONDUIT	NIC	NOT IN CONTRACT
C/B, CB	CIRCUIT BREAKER	NO	NORMALLY OPEN
CKT	CIRCUIT	NTS	NOT TO SCALE
DISC	DISCONNECT	P	POLE(S)
DP	DISTRIBUTION PANEL	PB	PULL BOX
DWG	DRAWING	PH	PHASE
E OR (E)	EXISTING	R OR (R)	EXISTING TO BE REMOVED
EA	EACH	RGS	RIGID GALVANIZED STEEL CONDUIT
EC	ELECTRICAL CONTRACTOR	SCH80	SCHEDULE 80
EF	EXHAUST FAN	SPEC	SPECIFICATION
EM	EMERGENCY	SW	SWITCH
EMT	ELECTRICAL METALLIC TUBING	SWBD	SWITCHBOARD
FL	FLOOR	THWN	THERMOPLASTIC HEAT AND WATER RESISTANT NYLON COAT
FLA	FULL LOAD AMPS	TYP	TYPICAL
G1, G2	PROPOSED GENERATOR # AS SHOWN ON SCHEDULE	UG	UNDERGROUND
GDP	GENERATOR DISTRIBUTION PANEL	UL	UNDERWRITERS LABORATORY
GEC	GROUND ELECTRODE CONDUCTOR	UON	UNLESS OTHERWISE NOTED
GFI, GFCI	GROUND FAULT CIRCUIT INTERRUPTER	V	VOLTS
G, GND	GROUND	VIF	VERIFY IN FIELD
GFP	GROUND FAULT PROTECTION	W	WATT
GRS	GALVANIZED RIGID STEEL CONDUIT	W	WEATHERPROOF
HZ	HERTZ		

AC WIRING COLOR CODING	
CONDUCTOR	120/208V SYSTEM
PHASE A	BLACK
PHASE B	RED
PHASE C	BLUE
NEUTRAL	WHITE
GROUND	GREEN

LIST OF DRAWINGS:

DRAWING NO.	DRAWING TITLE
E-1	ELECTRICAL GENERAL NOTES AND SCHEDULES
E-2	ELECTRICAL SUFFERN VILLAGE HALL FLOOR & SITE PLANS
E-3	ELECTRICAL SUFFERN VILLAGE HALL ONE LINE DIAGRAM
E-4	ELECTRICAL DPW GARAGE FLOOR & SITE PLANS
E-5	ELECTRICAL DPW GARAGE ONE LINE DIAGRAM
E-6	ELECTRICAL DETAILS 1 OF 2
E-7	ELECTRICAL DETAILS 2 OF 2
S-1	STRUCTURAL DETAILS 1 OF 2
S-2	STRUCTURAL DETAILS 2 OF 2

VILLAGE OF SUFFERN
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REV	DESCRIPTION	DATE

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New York Rising Community Reconstruction Program

NY RISING COMMUNITIES

GOSR
 Governor's Office of Storm Recovery
 Project Title
GOSR Program
 GENERATOR REPLACEMENT
 VILLAGE OF SUFFERN
 ROCKLAND COUNTY, NEW YORK

Drawing Title
ELECTRICAL GENERAL NOTES AND SCHEDULES

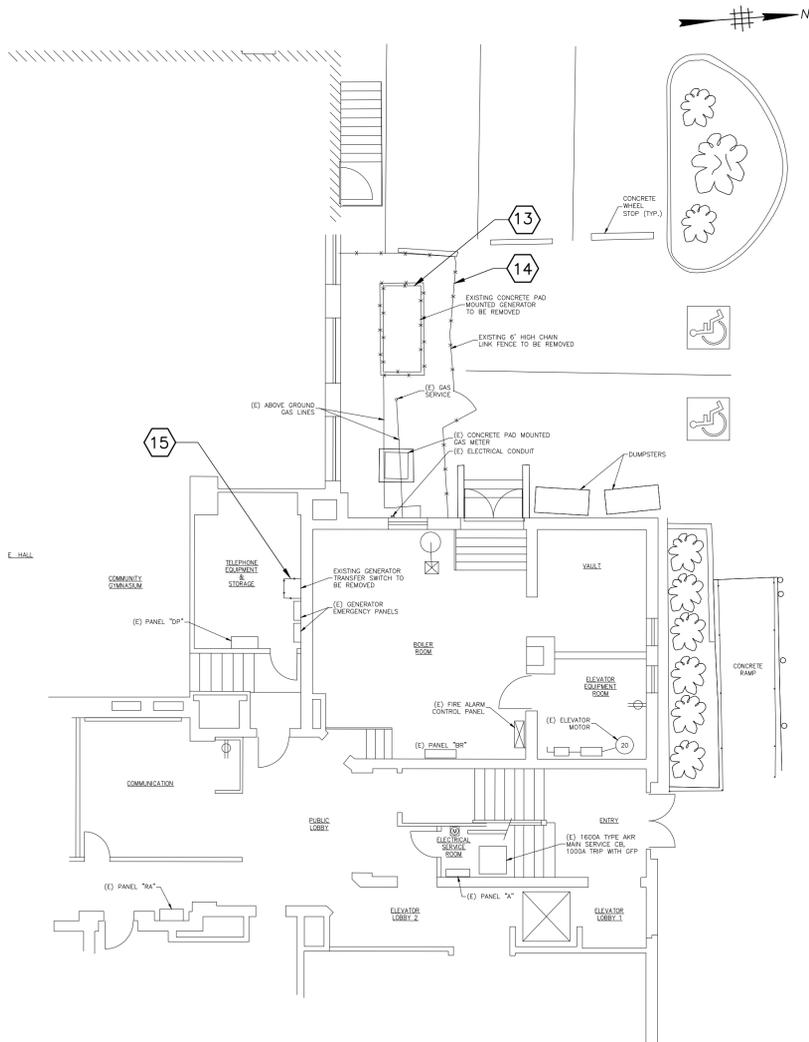
Phase
BID SET

Drawn By: **JJ** Checked By: **NS** Date: **05/21/2021**

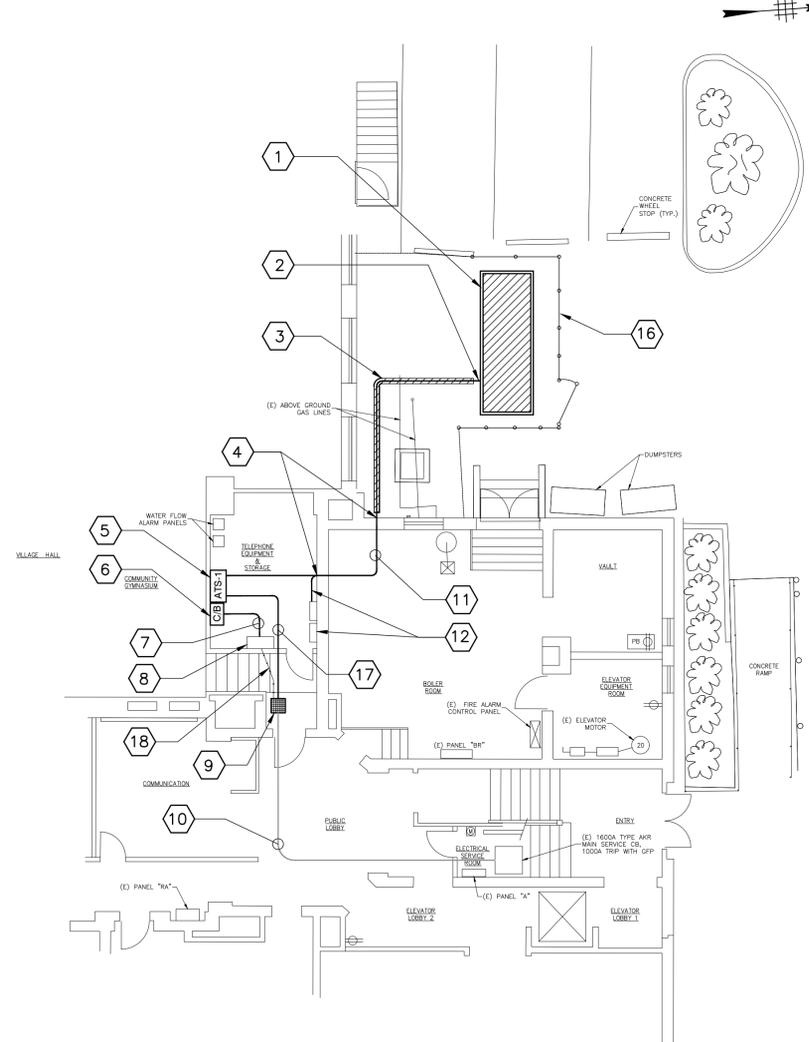
Seal & Signature


Drawing Number
E-1

Sheet #
 2 of 15



1
E-1
VILLAGE HALL FIRST FLOOR AND SITE DEMOLITION PLAN
SCALE: N.T.S.



2
E-2
VILLAGE HALL FIRST FLOOR AND SITE PROPOSED PLAN
SCALE: N.T.S.

USER GROUP, CONSTRUCTION CLASSIFICATION AND FIRE STOPPING NOTES:

1. VILLAGE HALL OCCUPANCY CLASSIFICATION USE GROUP: BUSINESS GROUP B.
2. CONSTRUCTION CLASSIFICATION: IB.
3. EXTERIOR BEARING WALL FIRE RATING: 2 HR.
4. INTERIOR BEARING WALL FIRE RATING: 2 HR.
5. NONBEARING PARTITION WALLS FIRE RATING: 0 HR.
6. PROVIDE 2 HOURS FIRE STOPPING AT EXTERIOR WALL OF BOILER ROOM AND BETWEEN BOILER ROOM AND ELECTRICAL ATS ROOM. SEE KEY NOTE NO. 4 AND DETAILS 4 AND 8, ON DRAWING E-6.

GENERAL NOTES:

1. FOR GENERAL NOTES, SYMBOLS, ABBREVIATIONS AND EQUIPMENT SCHEDULE REFER TO DRAWING NO. E-1.
2. DISCONNECT EXISTING PANEL "DP" FROM MAIN SERVICE CB FEEDER AND RECONNECT VIA ATS TO BOTH NORMAL AND STANDBY POWER. NOTIFY ELECTRIC UTILITY COMPANY AND COORDINATE WITH UTILITY COMPANY AND VILLAGE OF SUFFERN AUTHORITY FOR REQUIRED ELECTRIC POWER SHUTDOWN AND TURN "ON" FOR NEW CONSTRUCTION. KEEP POWER OUTAGE TO A MINIMUM.
3. REFER TO TRENCH DETAIL #5 ON DWG E-6.
4. SEE DWG. S-1 FOR LANDSCAPE, WALKWAY AND PAVEMENT RESTORATION DETAILS (TYPICAL).
5. PROVIDE GENERATOR CONTROL, STATUS, BATTERY CHARGER, BLOCK HEATER AND GFCI RECEPTACLE WIRING WITHIN GENERATOR ENCLOSURE AS PER MANUFACTURER'S REQUIREMENTS AND AS PER CODE.
6. ALL UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 80 CONDUIT; ALL ABOVEGROUND OUTDOOR EXPOSED CONDUITS SHALL BE RIGID GALVANIZED STEEL CONDUITS (RGS). PROVIDE PVC TO RGS CONDUIT COUPLING FOR TRANSITION FROM UNDERGROUND TO ABOVEGROUND CONDUIT RUNS. INDOOR CONDUITS MAY BE RGS OR EMT.

DRAWING PLAN KEY NOTES:

1. PROPOSED G1, 175KW STANDBY GENERATOR LOCATION ON CONCRETE PAD. FINAL LOCATION TO BE COORDINATED WITH THE BUILDING OWNER, PRIOR TO ANY INSTALLATION WORK. SEE GENERATOR SCHEDULE ON DWG. E-1. SEE DETAIL 1 AND 2 ON DWG. S-2 FOR GENERATOR BASE CONCRETE PAD. SEE DETAIL 7 ON DWG. E-6, FOR GENERATOR GROUNDING REQUIREMENTS.
2. UNDERGROUND CONDUITS AND WIRING CONNECTIONS. SEE DWG. E-3, VILLAGE HALL ONE LINE DIAGRAM, FOR FEEDER CONDUITS AND WIRING SIZES.
3. SAW CUT EXISTING PAVEMENT. PROVIDE TRENCHING AND BACKFILLING FOR UNDERGROUND CONDUITS AND WIRING RUNS. RESTORE AND PATCH TO MATCH EXISTING CONDITIONS. SEE RESTORATION DETAILS ON DWG. S-1. APPROXIMATE AREA: 50 S.F. ELECTRICAL TRENCH WILL BE COVERED AFTER HOURS AND THE EXIT PASSAGEWAY SHALL BE MAINTAINED.
4. CORE DRILL EXISTING WALL FOR CONDUITS RUNS. PROVIDE WATER SEAL AT EXTERIOR WALL AND 2 HOURS FIRE STOPPING BETWEEN BOILER ROOM AND ELECTRICAL ATS AND PANEL ROOM. FIELD VERIFY EXACT LOCATIONS OF CORE DRILLS AND CONDUIT RUNS.
5. ATS-1, AUTOMATIC TRANSFER SWITCH, 1000A. SEE ATS SCHEDULE ON DWG. E-1. SEE DWG. E-3, VILLAGE HALL ONE LINE DIAGRAM FOR CONDUITS AND WIRING CONNECTIONS. EXISTING SHELVES SHALL BE REMOVED TO MAKE ROOM FOR THE ATS.
6. PROVIDE 208V, 3-P, 800A, 65K A.I.C. ENCLOSED CIRCUIT BREAKER.
7. 2 SETS OF 4 #600 KCMIL & 1 #2 GND EACH IN 4" C.
8. EXISTING 208/120V, 3-PHASE, 4-WIRE, 800A, PANEL "DP" TO REMAIN. DISCONNECT FROM MAIN SERVICE CB FEEDER AND RECONNECT VIA ATS TO BOTH NORMAL AND STANDBY POWER.
9. CUT AND INTERCEPT EXISTING CONDUITS AND WIRING TO PANEL "DP" IN CEILING. FIELD VERIFY EXACT LOCATION. INSTALL A JUNCTION BOX OF ADEQUATE SIZE. SPLICE AND EXTEND SAME SIZE CONDUITS AND WIRING TO PROPOSED ATS-1. GYPSUM BOARD CEILING TO BE CUT. PATCH EXISTING GYPSUM BOARD CEILING TO MATCH EXISTING FINISH.
10. (E) 3 SETS OF 4 #350 KCMIL, EACH IN 3" C, TO REMAIN.
11. 2 SETS OF 4 #600 KCMIL & 1 #2 GND EACH IN 4" C AND 1" C W/ CONTROL WIRING & GENERATOR STATUS TO ATS.
12. PROVIDE 3 #8 AWG AND 1 #10 AWG GND IN 1" C FROM EXISTING EMERGENCY PANEL TO LOAD CENTER IN GENERATOR ENCLOSURE. PROVIDE A 2-POLE, 40A BREAKER IN EXISTING EMERGENCY PANEL AND CONNECT TO GENERATOR LOAD CENTER FEEDER.
13. REMOVE EXISTING 35 KW GENERATOR, AFTER PROPOSED GENERATOR IS INSTALLED, TESTED AND OPERATIONAL.
14. REMOVE EXISTING CHAIN LINK FENCE TO MAKE ROOM FOR PROPOSED GENERATOR.
15. REMOVE EXISTING ATS, AFTER PROPOSED GENERATOR IS INSTALLED, TESTED AND OPERATIONAL.
16. PROVIDE CHAIN LINK FENCE TO ENCLOSE PROPOSED GENERATOR.
17. (N) 3 SETS OF 4 #350 KCMIL, EACH IN 3" C.
18. (R) 3 SETS OF 4 #350 KCMIL, EACH IN 3" C, TO BE REMOVED.

BID ALTERNATE NO. 1



VILLAGE OF SUFFERN

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REVISIONS		
Rev No	Description	Date

New York Rising Community Reconstruction Program



GOSR
Governor's Office of Storm Recovery

Project Title
GOSR Program
GENERATOR REPLACEMENT
VILLAGE OF SUFFERN
ROCKLAND COUNTY, NEW YORK

Drawing Title
ELECTRICAL
SUFFERN VILLAGE HALL
FLOOR & SITE PLANS

Phase
BID SET
Drawn By: **JJ** Checked By: **NS** Date: **05/21/2021**



Drawing Number
E-2
Sheet #
3 of 15



VILLAGE OF SUFFERN

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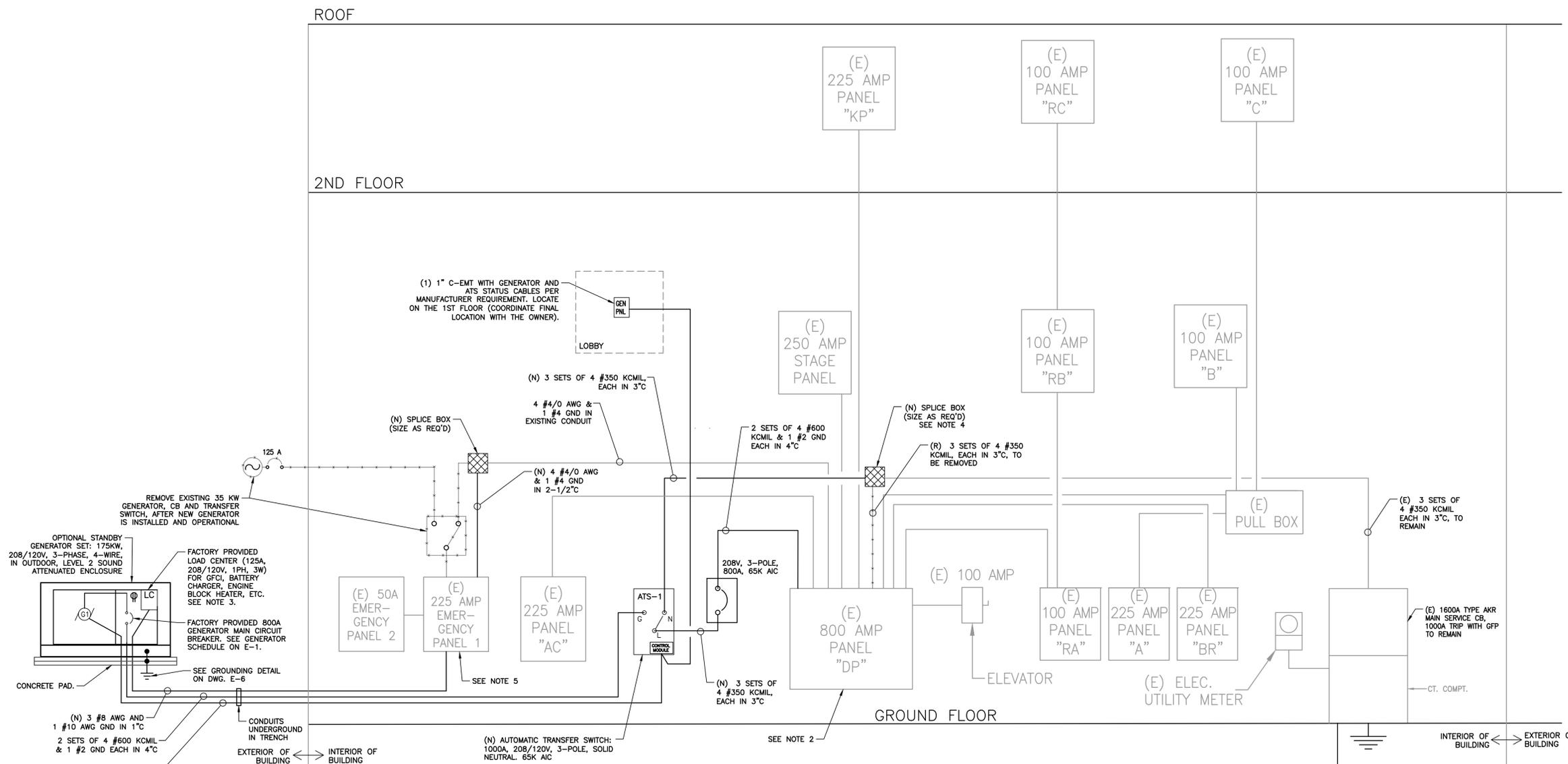
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1
E-3 VILLAGE HALL ELECTRICAL RISER DIAGRAM
N.T.S.

ELECTRICAL NOTES:

- FOR GENERAL NOTES, SYMBOLS, ABBREVIATIONS AND EQUIPMENT SCHEDULE REFER TO DRAWING NO. E-1.
- DISCONNECT EXISTING PANEL "DP" FROM MAIN SERVICE CB FEEDER AND RECONNECT VIA ATS TO BOTH NORMAL AND STANDBY POWER. NOTIFY ELECTRIC UTILITY COMPANY AND COORDINATE WITH UTILITY COMPANY AND VILLAGE OF SUFFERN AUTHORITY FOR REQUIRED ELECTRIC POWER SHUTDOWN AND TURN "ON" FOR NEW CONSTRUCTION. KEEP POWER OUTAGE TO A MINIMUM.
- PROVIDE GENERATOR CONTROL, STATUS, BATTERY CHARGER, BLOCK HEATER AND GFCI RECEPTACLE WIRING WITHIN GENERATOR ENCLOSURE AS PER MANUFACTURER'S REQUIREMENTS AND AS PER CODE.
- CUT AND INTERCEPT EXISTING CONDUITS AND WIRING TO PANEL "DP" IN CEILING. FIELD VERIFY EXACT LOCATION. INSTALL A JUNCTION BOX OF ADEQUATE SIZE. SPLICE AND EXTEND SAME SIZE CONDUITS AND WIRING TO PROPOSED ATS-1. GYPSUM BOARD CEILING TO BE CUT. PATCH EXISTING GYPSUM BOARD CEILING TO MATCH EXISTING FINISH.
- PROVIDE A 2-POLE, 40A BREAKER IN EXISTING EMERGENCY PANEL AND CONNECT TO GENERATOR LOAD CENTER FEEDER.

PHASING AND TEMPORARY POWER REQUIREMENTS:

- ALL POWER SHUTDOWN SHALL BE COORDINATED WITH THE VILLAGE HALL. THE CONTRACTOR SHALL MAKE THE NECESSARY ELECTRICAL CONNECTIONS ON THE WEEKENDS.
- THE VILLAGE HALL MAY BE SHUT DOWN, WITH THE EXCEPTION OF THE POLICE STATION WHICH HAS ITS OWN GENERATOR, FROM FRIDAY AT 9:00PM TO MONDAY AT 6:30AM. IF THE CONTRACTOR ANTICIPATES THAT MORE TIME WILL BE NEEDED, CONTRACTOR IS TO PROVIDE TEMPORARY POWER TO THE VILLAGE HALL AND POLICE STATION (PROVIDE SAME TEMPORARY POWER AS THE PROPOSED GENERATOR).
- POWER SUPPLY TO THE POLICE STATION, WHICH HAS ITS OWN GENERATOR, SHALL BE MAINTAINED AT ALL TIMES. MAKE NECESSARY TEMPORARY CONNECTIONS AS REQUIRED IN FIELD, TO MAINTAIN POWER SUPPLY TO THE POLICE STATION AT ALL TIMES, WITHOUT ANY POWER INTERRUPTION.

BID ALTERNATE NO. 1

REV	DESCRIPTION	DATE

New York Rising Community Reconstruction Program



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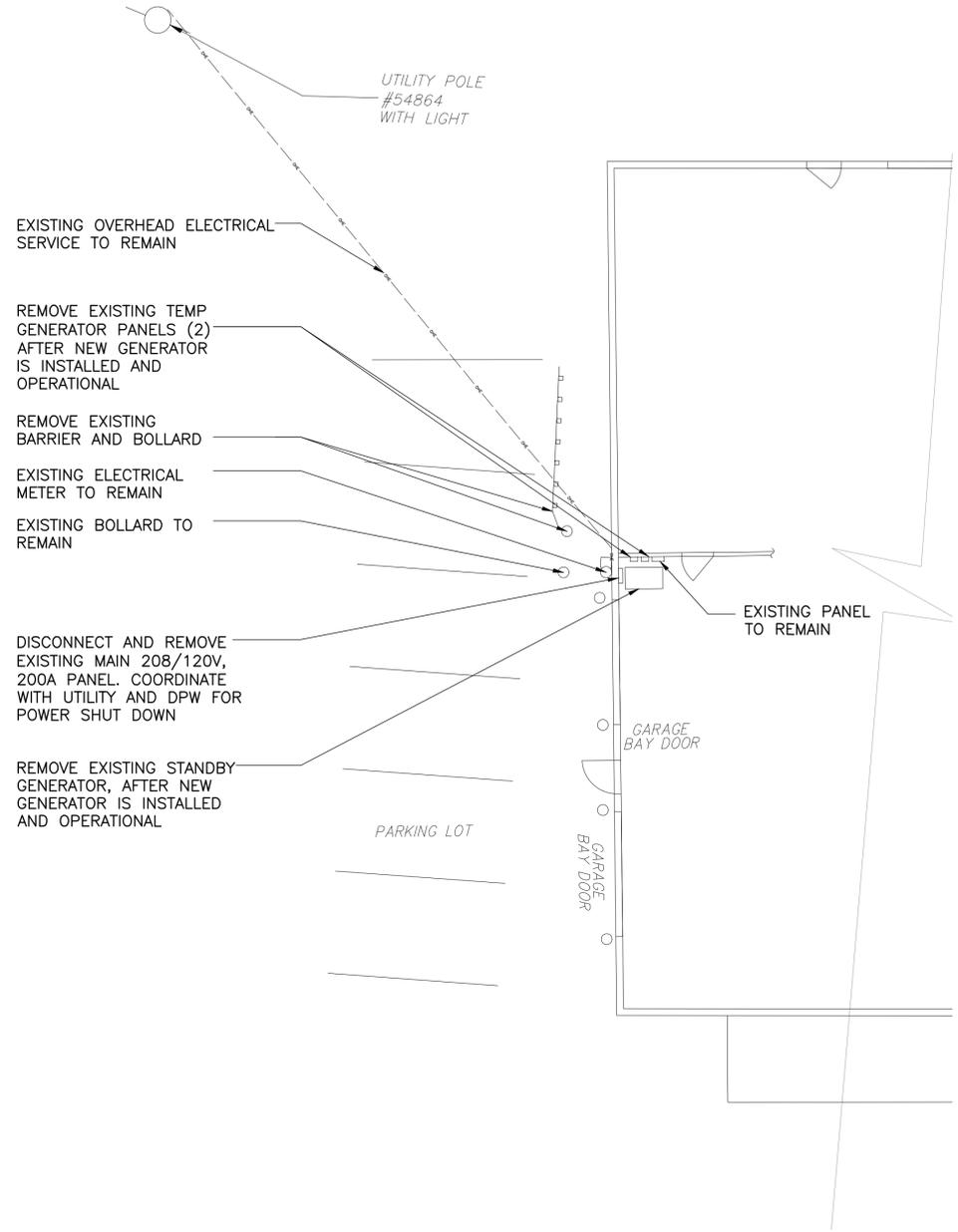
Project Title
GOSR Program
GENERATOR REPLACEMENT
VILLAGE OF SUFFERN
ROCKLAND COUNTY, NEW YORK

Drawing Title
ELECTRICAL
SUFFERN VILLAGE HALL
ONE LINE DIAGRAM

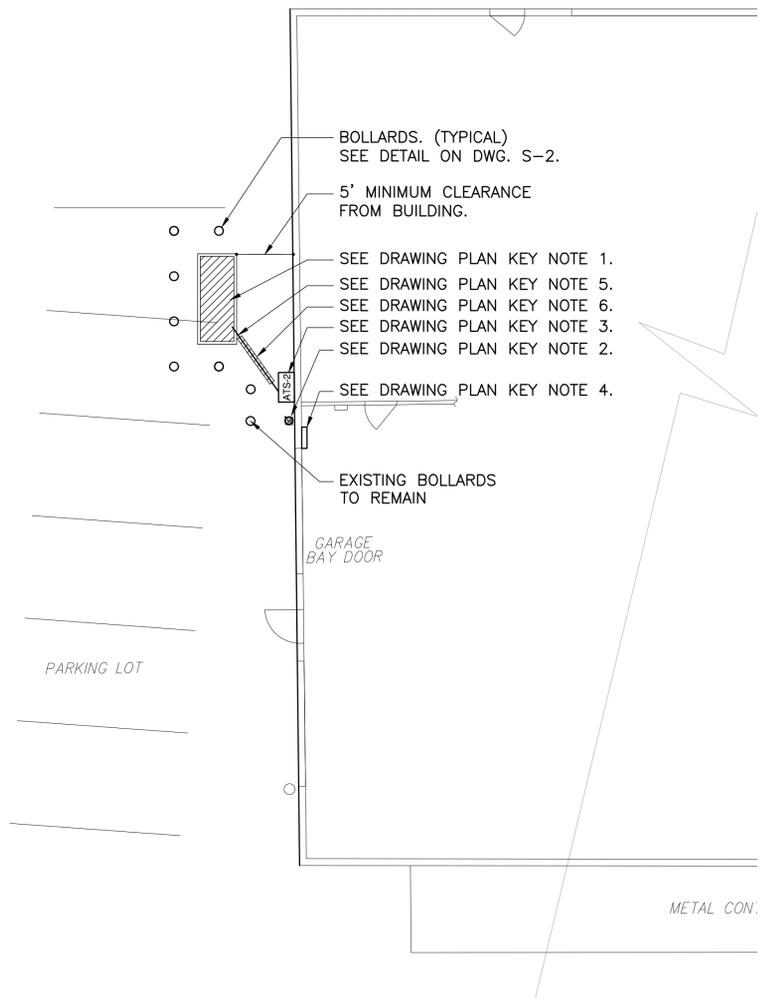
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BID SET
Drawn By: JJ
Checked By: NS
Date: 05/21/2021

Seal & Signature

Drawing Number
E-3
Sheet #
4 of 15



1 DPW GARAGE DEMOLITION PLAN
 E-4 SCALE: N.T.S.



2 DPW GARAGE PROPOSED PLAN
 E-4 SCALE: N.T.S.

GENERAL NOTES:

- FOR GENERAL NOTES, SYMBOLS, ABBREVIATIONS AND EQUIPMENT SCHEDULE REFER TO DRAWING NO. E-1.
- SEE DWG. S-1 FOR LANDSCAPE, WALKWAY AND PAVEMENT RESTORATION DETAILS (TYPICAL).

DRAWING PLAN KEY NOTES:

- PROPOSED G2, 208/120V, 3-PHASE, 4-WIRE, 50KW OPTIONAL STANDBY GENERATOR ON CONCRETE PAD. SEE DETAIL 1 & 2 ON DWG. S-2 FOR GENERATOR BASE CONCRETE PAD. SEE DETAIL 7 ON DWG. E-6, FOR GENERATOR GROUNDING REQUIREMENTS.
- EXISTING ELECTRIC METER. DISCONNECT AND REMOVE EXISTING CONDUIT AND WIRING CONNECTION FROM METER TO HOUSE ELECTRIC PANEL. PROVIDE CONDUIT AND WIRING FROM METER TO ATS. NOTIFY ELECTRIC UTILITY COMPANY AND COORDINATE WITH UTILITY COMPANY AND VILLAGE OF SUFFERN FOR REQUIRED ELECTRIC POWER SHUTDOWN AND TURN "ON" FOR NEW CONSTRUCTION. KEEP POWER OUTAGE TO A MINIMUM.
- ATS ON EXTERIOR BUILDING WALL AT 24" ABOVE GRADE, NEXT TO EXISTING METER. PROVIDE STEEL ANGLE BRACKET SUPPORT. SEE ONE LINE DIAGRAM ON DWG. E-5.
- REPLACE EXISTING MAIN PANEL WITH A 208/120V, 3-P, 4-W, 225A, 42 POLE PANEL. SEE PANEL SCHEDULE ON DWG. E-5. RECONNECT EXISTING LOADS TO REPLACED PANEL CIRCUIT BREAKERS.
- SEE ONE LINE DIAGRAM, ON DRAWING E-5 FOR CONDUITS AND WIRING. SEE UNDERGROUND FEEDERS SCHEDULE BELOW:
 - 4#4/0 AWG & 1#6 GND TYPE THWN WIRE IN 2-1/2" SCHEDULE 80 PVC CONDUIT FOR GENERATOR FEEDER.
 - 6#12 AWG TYPE THWN WIRE IN 1" SCHEDULE 80 PVC CONDUIT FOR GENERATOR CONTROL AND BATTERY CHARGER.
 - 3#8 AWG & 1#10 GND IN 1" SCHEDULE 80 PVC CONDUIT FOR LOAD CENTER IN GENERATOR ENCLOSURE. PROVIDE A 2-POLE, 40A BREAKER IN NEW PANEL AND CONNECT TO GENERATOR LOAD CENTER FEEDER. PROVIDE WIRING FOR BATTERY CHARGER, BLOCK HEATER, GFCI RECEPTACLE, ETC.
 - ALL UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 80 CONDUITS. ALL ABOVEGROUND OUTDOOR EXPOSED CONDUITS SHALL BE RIGID GALVANIZED STEEL CONDUITS (RGS). PROVIDE PVC TO RGS CONDUIT COUPLING FOR TRANSITION FROM UNDERGROUND TO ABOVEGROUND CONDUIT RUNS. INDOOR CONDUITS MAY BE RGS OR EMT.
- SAW CUT EXISTING PAVEMENT. REFER TO TRENCH DETAIL #5 ON DWG E-6. RESTORE AND PATCH TO MATCH EXISTING. SEE RESTORATION DETAILS ON DWG. S-1. APPROXIMATE AREA: 30 S.F. ELECTRICAL TRENCH SHALL BE COVERED AFTER HOURS AND THE EGRESS DOOR SHALL BE LEFT OPERABLE.

PHASING AND TEMPORARY POWER REQUIREMENTS:

- ALL POWER SHUTDOWN SHALL BE COORDINATED WITH THE DPW GARAGE. THE CONTRACTOR SHALL MAKE THE NECESSARY ELECTRICAL CONNECTIONS ON THE WEEKENDS.
- THE DPW GARAGE MAY BE SHUT DOWN FROM FRIDAY AT 4:30PM TO MONDAY AT 6:30AM. IF THE CONTRACTOR ANTICIPATES MORE TIME IS NEEDED TO MAKE THE CONNECTIONS, THE CONTRACTOR IS TO PROVIDE TEMPORARY POWER TO THE DPW GARAGE (PROVIDE THE SAME TEMPORARY POWER AS THE PROPOSED GENERATOR).

USER GROUP, CONSTRUCTION CLASSIFICATION AND FIRE STOPPING NOTES:

- DPW GARAGE OCCUPANCY CLASSIFICATION USE GROUP: UTILITY GROUP U.
- CONSTRUCTION CLASSIFICATION: IIB
- EXTERIOR BEARING WALL FIRE RATING: 0 HR.
- INTERIOR PARTITION WALLS FIRE RATING: 0 HR.
- NO FIRE STOPPING REQUIRED FOR CONDUIT PENETRATION AT EXTERIOR WALL.



VILLAGE OF SUFFERN

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New York Rising Community Reconstruction Program



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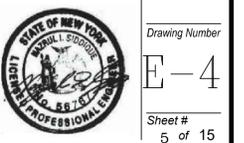
GOSR Program

GENERATOR REPLACEMENT
 VILLAGE OF SUFFERN
 ROCKLAND COUNTY, NEW YORK

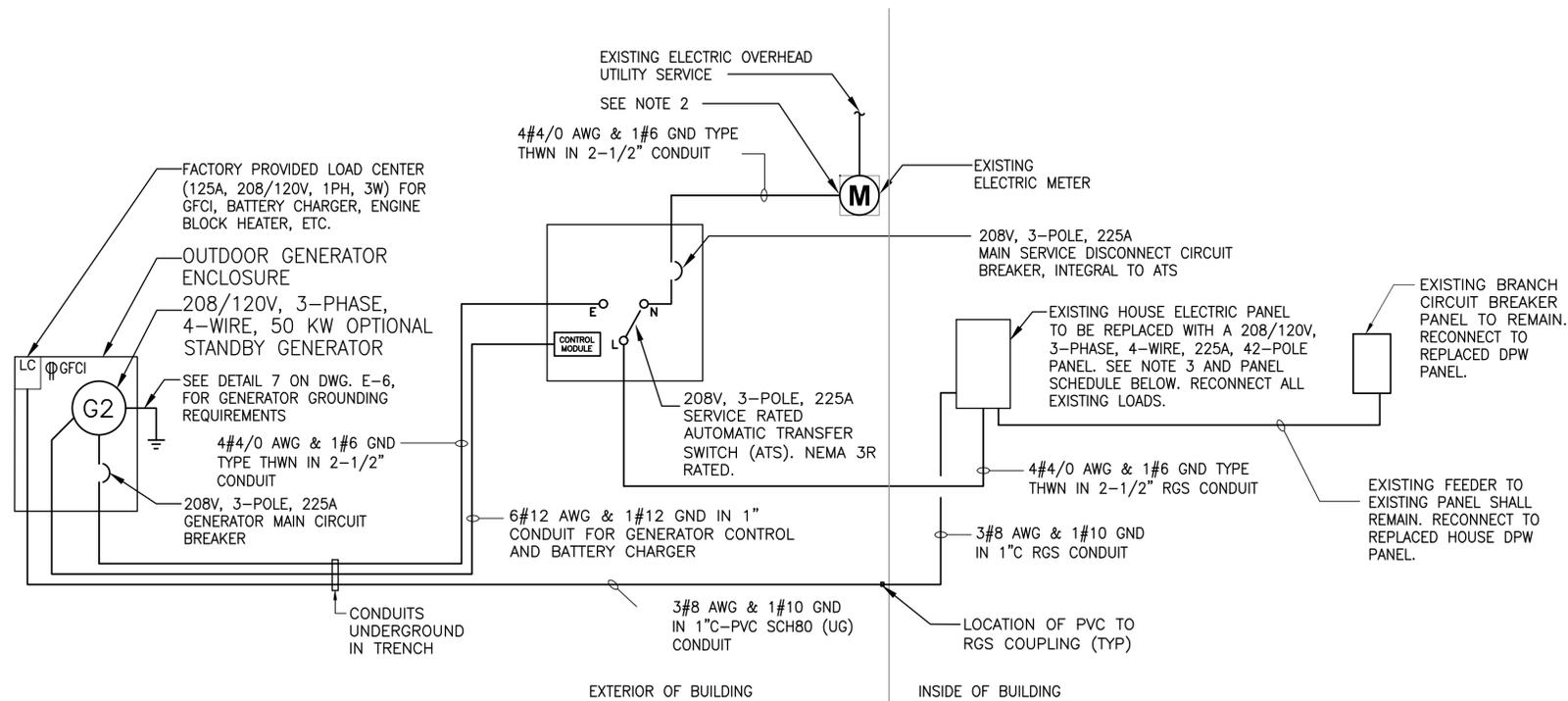
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 SUFFERN DPW GARAGE
 FLOOR & SITE PLANS

Phase
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Drawn By: JJ
 Checked By: NS
 Date: 05/21/2021



Drawing Number
E-4
 Sheet #
 5 of 15



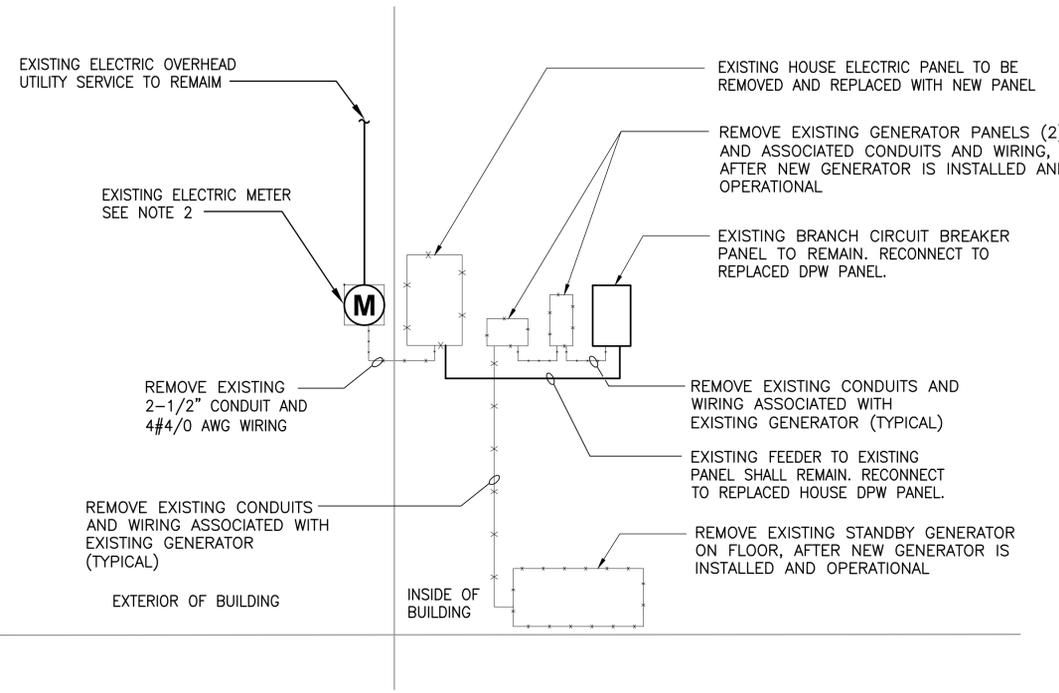
- NOTES:**
- FOR GENERAL NOTES, SYMBOLS, ABBREVIATIONS AND EQUIPMENT SCHEDULE REFER TO DRAWING NO. E-1.
 - DISCONNECT AND REMOVE EXISTING CONDUIT AND WIRING CONNECTION FROM METER TO HOUSE ELECTRIC PANEL. PROVIDE CONDUIT AND WIRING FROM METER TO ATS. NOTIFY ELECTRIC UTILITY COMPANY AND COORDINATE WITH UTILITY COMPANY FOR REQUIRED ELECTRIC POWER SHUTDOWN AND TURN "ON" FOR NEW CONSTRUCTION. KEEP POWER OUTAGE TO A MINIMUM. IF THE HOLE WHICH REMAINS FROM THE REMOVED CONDUIT IS NOT BEING REUSED, THE CONTRACTOR SHALL SEAL AND REPAIR THE HOLE TO MATCH THE EXISTING AREA.
 - PROVIDE A 208/120V, 2-POLE, 40A CIRCUIT BREAKER IN REPLACEMENT PANEL FOR LOAD CENTER IN GENERATOR ENCLOSURE.

1
E-5
DPW GARAGE ELECTRICAL ONE LINE DIAGRAM
SCALE: NTS

PANELBOARD DPW (NEW)										LOCATION: DPW GARAGE	
CHARACTERISTICS:		VOLTS: 120/208V		PHASE: 3Ø, 4W, +GND		NEUTRAL: 100%					
MAIN PROTECTIVE DEVICE: 225A		BRANCH BKRS: BOLT-ON		CYCLES: 60		DOOR REQ'D: YES		MOUNTING: SURFACE			
MAIN BUS SIZE: 225A				MIN. CB IC: 42 KAIC		NO. OF POLES: 42					
TYPE: TYPE 1											
CKT NO.	DESIGNATION	BREAKER TRIP	P	BRANCH CIRCUIT	LOAD (VA)			BRANCH CIRCUIT	BREAKER TRIP	DESIGNATION	CKT. NO.
1					A	B	C	EXISTING	1 20	(E) EXISTING LOAD	2
3	(E) EXISTING LOAD	20	3	EXISTING				EXISTING	1 20	(E) EXISTING LOAD	4
5								EXISTING	1 20	(E) EXISTING LOAD	6
7	(E) EXISTING LOAD	20	1	EXISTING				EXISTING	1 20	(E) EXISTING LOAD	8
9	(E) EXISTING LOAD	20	1	EXISTING				EXISTING	1 20	(E) EXISTING LOAD	10
11	(E) EXISTING LOAD	15	1	EXISTING				EXISTING	1 20	(E) EXISTING LOAD	12
13	(E) EXISTING LOAD	15	1	EXISTING				EXISTING	1 20	(E) EXISTING LOAD	14
15								EXISTING	1 20	(E) EXISTING LOAD	16
17	(E) EXISTING LOAD	60	3	EXISTING							18
19									3 20	SPARE	20
21	(E) EXISTING LOAD	20	1								22
23	(E) EXISTING LOAD	20	1						1 30	(E) EXISTING LOAD	24
25	(E) EXISTING LOAD	20	1						1 30	(E) EXISTING LOAD	26
27	(E) EXISTING LOAD	20	1						2 20	(E) EXISTING LOAD	28
29	(E) EXISTING LOAD	30	2						1 20	(E) EXISTING LOAD	30
31									1 20	(E) EXISTING LOAD	32
33	SPARE	50	2						1 20	(E) EXISTING LOAD	34
35											36
37	(E) EXISTING LOAD	20	1						2 100	(E) EXISTING LOAD	38
39	SPARE	20	1								40
41	SPARE	20	1						2 40	GENERATOR LOAD CENTER & LC	42
TOTAL VA PER PHASE								TOTAL LOAD			

REMARKS:
* FIELD VERIFY AND ADJUST CIRCUIT/FEEDER SIZE TO MATCH EXISTING

2
E-5
DPW GARAGE REPLACEMENT PANEL SCHEDULE
SCALE: NTS



3
E-5
DPW GARAGE ELECTRICAL DEMOLITION ONE LINE DIAGRAM
SCALE: NTS

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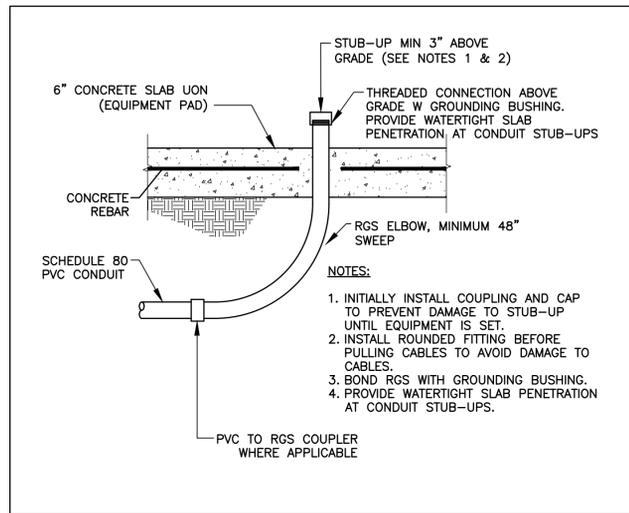
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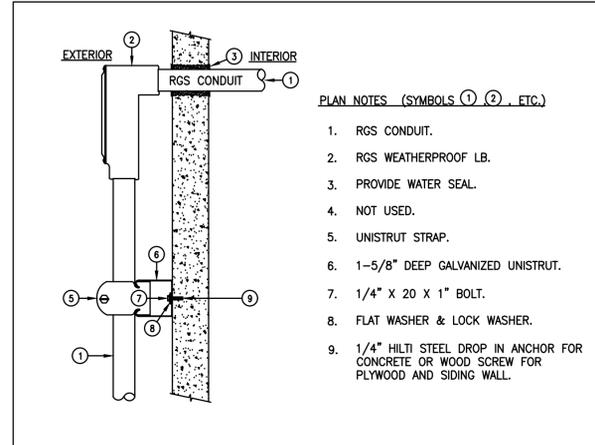
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New York Rising Community Reconstruction Program
NY RISING COMMUNITIES
GOSR
Governor's Office of Storm Recovery
Project Title
GOSR Program
GENERATOR REPLACEMENT
VILLAGE OF SUFFERN
ROCKLAND COUNTY, NEW YORK

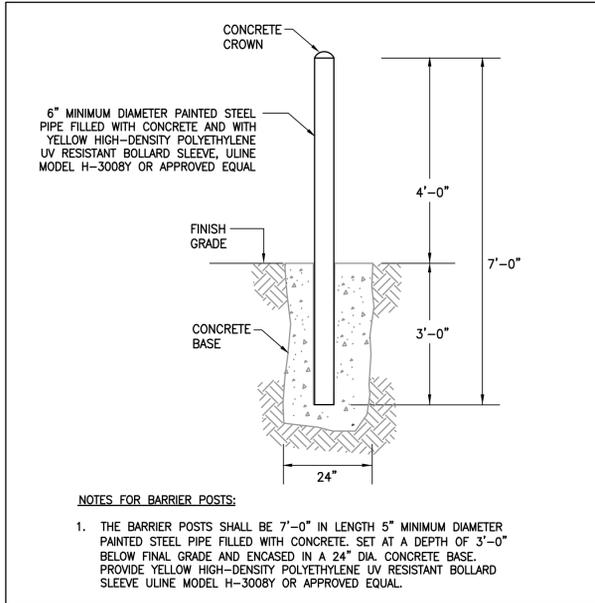
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ELECTRICAL SUFFERN DPW GARAGE ONE LINE DIAGRAM
Phase
BID SET
Drawn By: JJ
Checked By: NS
Date: 05/21/2021
Seal & Signature
Drawing Number
E-5
Sheet #
6 of 15



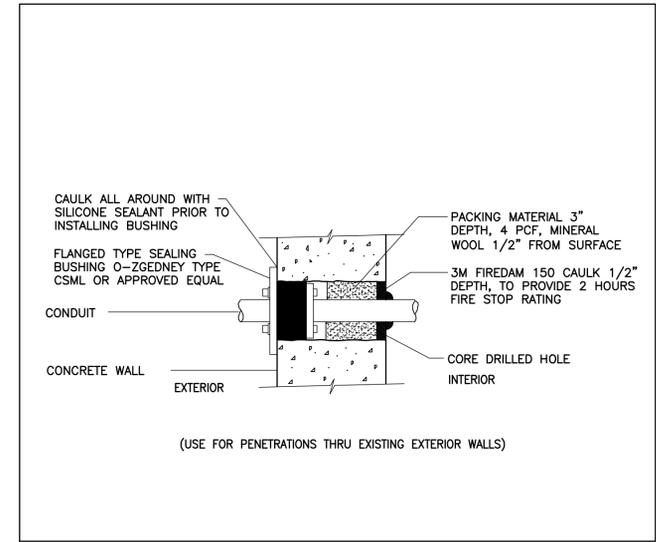
1 TYPICAL CONDUIT STUB UP DETAIL
E-6 SCALE: N.T.S.



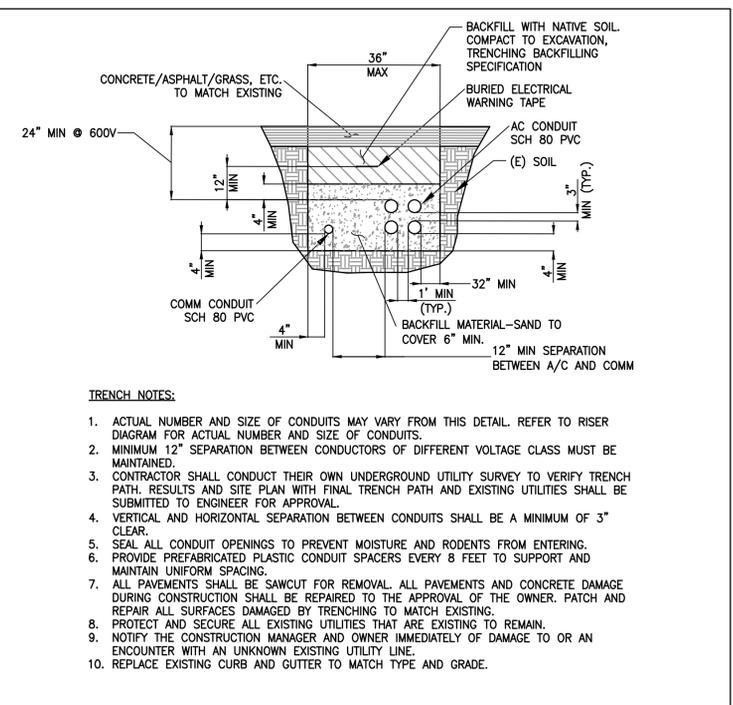
2 TYPICAL CONDUIT PENETRATION THRU EXISTING WALL
E-6 SCALE: N.T.S.



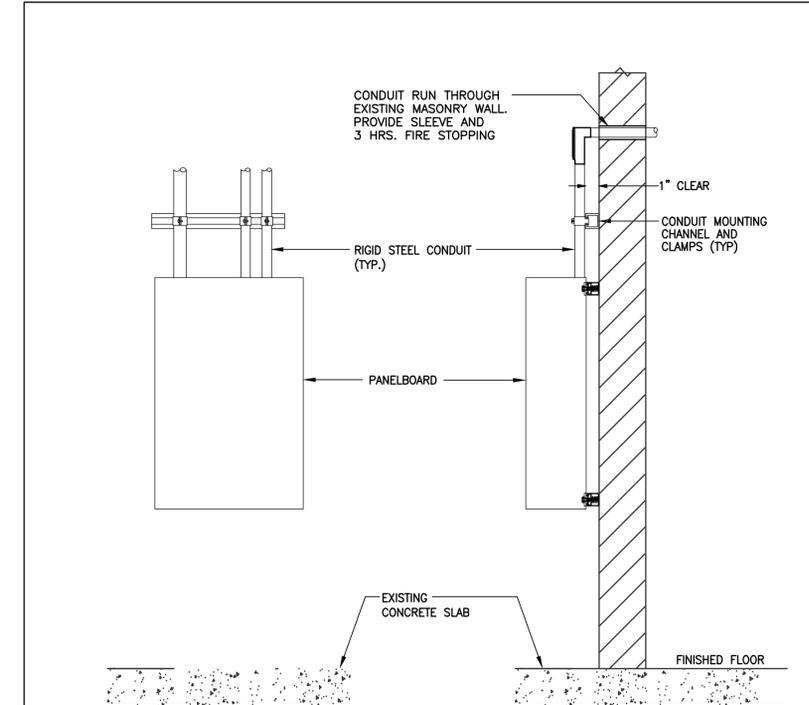
3 TYPICAL BOLLARD DETAIL
E-6 SCALE: N.T.S.



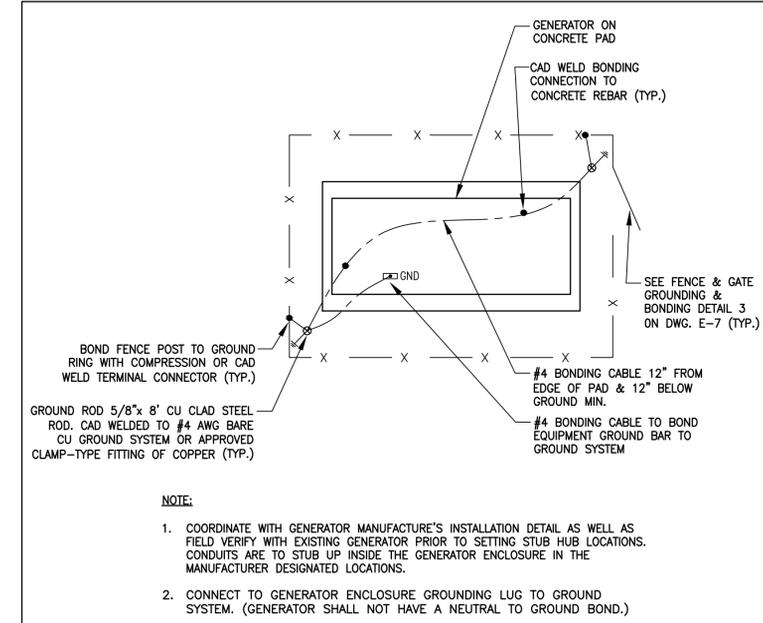
4 CONDUIT EXTERIOR WALL PENETRATION DETAIL
E-6 SCALE: N.T.S.



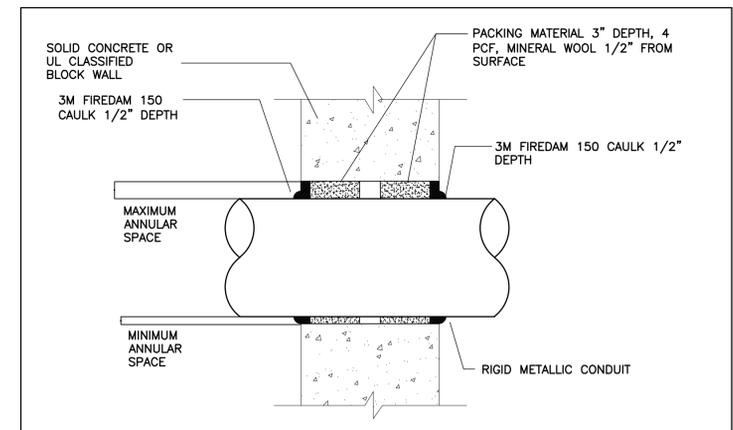
5 TYPICAL TRENCH DETAIL
E-6 SCALE: N.T.S.



6 TYPICAL ELECTRICAL EQUIPMENT INSTALLATION
E-6 SCALE: N.T.S.



7 TYPICAL GENERATOR PAD GROUNDING
E-6 SCALE: N.T.S.



8 CONDUIT INTERIOR WALL FIRE STOP DETAIL
E-6 SCALE: N.T.S.

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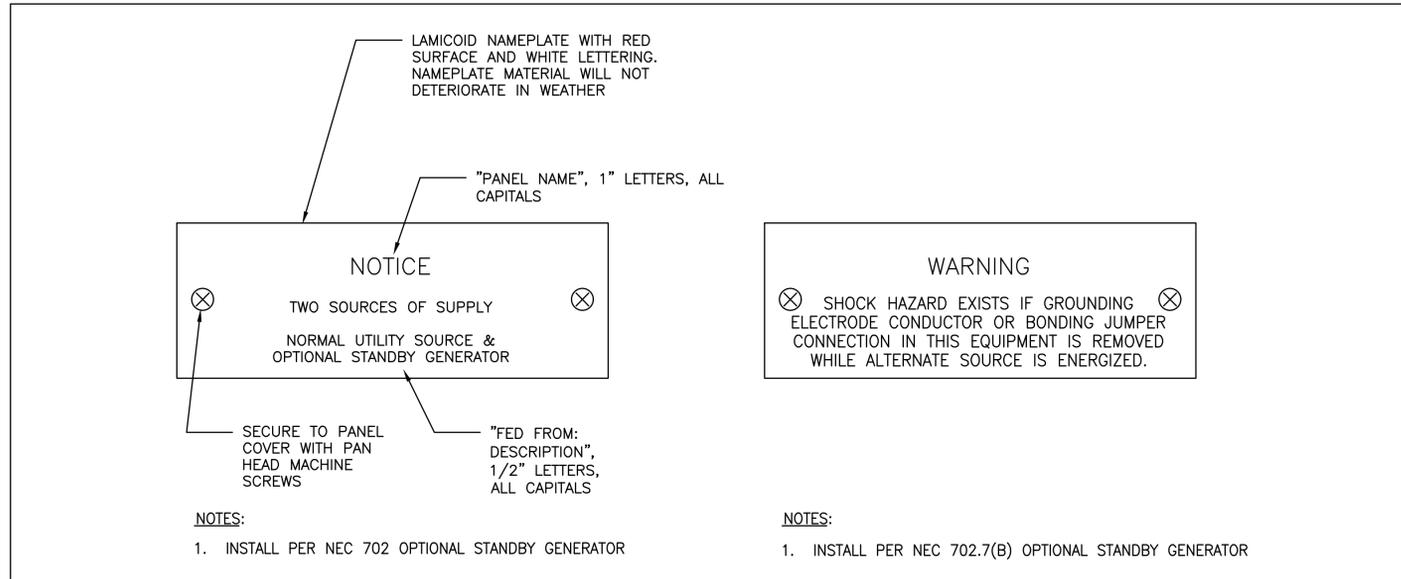
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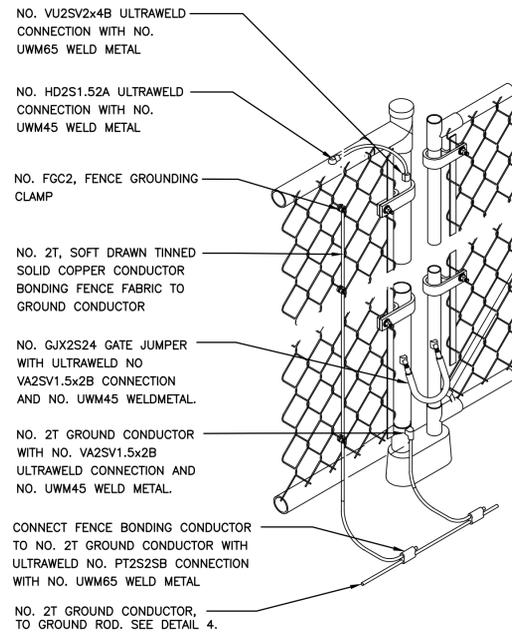
New York Rising Community Reconstruction Program
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GOSR
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Project Title
GOSR Program
GENERATOR REPLACEMENT
VILLAGE OF SUFFERN
ROCKLAND COUNTY, NEW YORK

Drawing Title
ELECTRICAL DETAILS 1 OF 2
Phase
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Drawn By: JJ NS
Checked By: NS
Date: 05/21/2021
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Drawing Number
E-6
Sheet #
7 of 15



1 TYPICAL SIGN DETAIL
E-7

SCALE: N.T.S.

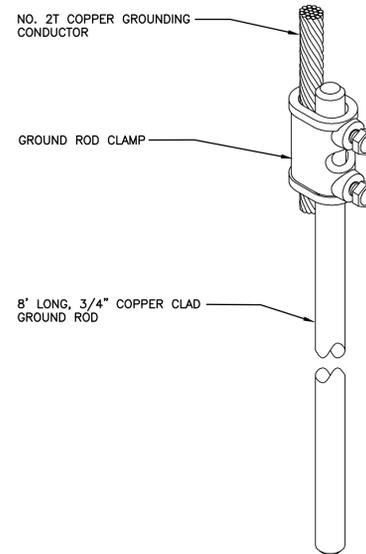


NOTES:

- ALL PART NOES. ARE BASED ON HARGER LIGHTNING & GROUNDING CO. TEL. NO. 800-842-7437.
- PROVIDE GROUNDING ROD AT EVERY 50' INTERVAL OF FENCE. FOR ANY FENCE SECTION LESS THAN 50', PROVIDE ONE GROUNDING ROD.

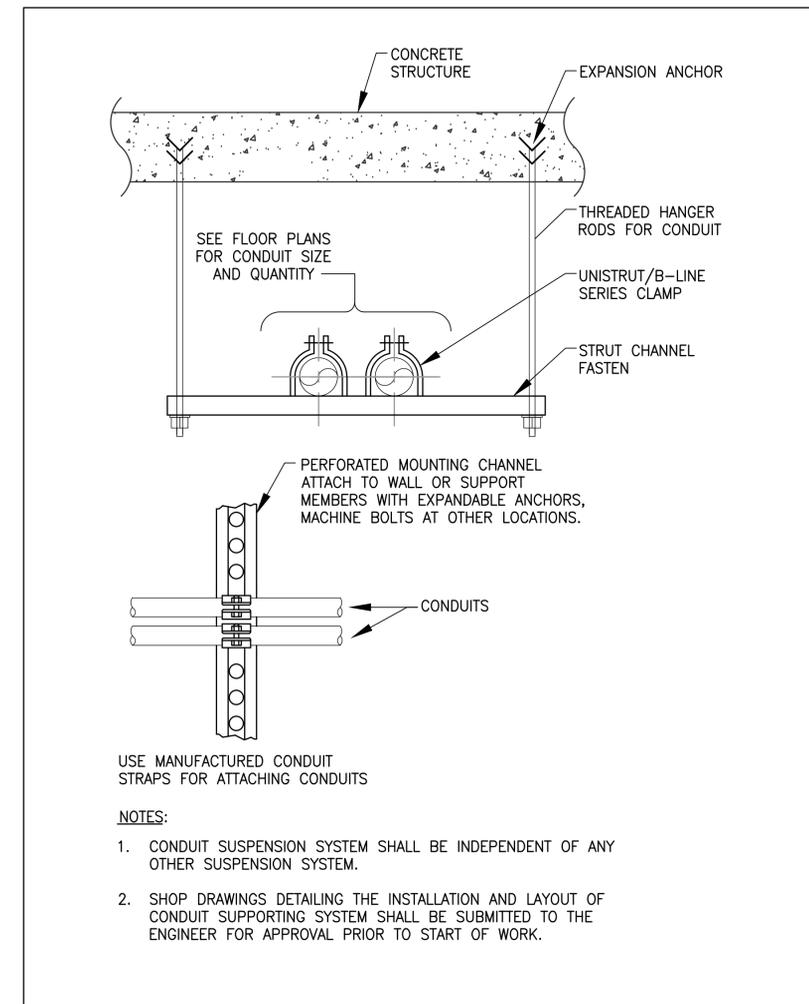
3 TYPICAL FENCE & GATE GROUNDING & BONDING DETAIL
E-7

SCALE: N.T.S.



4 GROUND ROD DETAIL
E-7

SCALE: N.T.S.



2 TYPICAL MULTIPLE CONDUIT SUPPORT DETAIL
E-7

SCALE: N.T.S.



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New York Rising Community Reconstruction Program



GOSR
Governor's Office of Storm Recovery

Project Title
GOSR Program
GENERATOR REPLACEMENT
VILLAGE OF SUFFERN
ROCKLAND COUNTY, NEW YORK

Drawing Title
**ELECTRICAL
DETAILS 2 OF 2**

Phase
BID SET

Drawn By: JJ
Checked By: NS
Date: 05/21/2021

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E-7

Sheet #
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NATURAL GAS NOTES

- 1. ALL PIPING SHALL BE RUN STRAIGHT AND PLUMB, AS DIRECT AS POSSIBLE. 2. PIPE SHALL BE FULL LENGTH TO GREATEST EXTENT AS POSSIBLE...

GENERAL PLUMBING NOTES

- 1. EACH BIDDER SHALL VISIT THE SITE AND BECOME INFORMED AS TO THE CONDITION OF THE PREMISES AND THE EXTENT AND CHARACTER OF WORK REQUIRED...

Table with 2 columns: Symbol and Description. Includes symbols for above ground natural gas pipe, underground natural gas pipe, gas shut-off valve, connect to existing, gas pressure regulator, pipe down, pipe up, T-fitting, and gas meter.

Table with 2 columns: Abbreviation and Full Name. Includes BTU, BTU/HR, CAP, CONT., CU. FT., CU. IN., D, DIAM., DN, DWG, FT, GAL, GPH, GPM, H, HDPE, HP, HR, HZ, IN, L, LBS, LPG, M, MAX, MBH, MIN, NG, N.I.C., N.T.S., PC, PRV, PSI, R, SQ.FT, TYP., UON, WC.

GENERAL SITE WORK NOTES (CAUTION TO CONTRACTOR):

- 1. CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING UNDERGROUND UTILITIES (MARKUP) IN AREAS TO BE TRENCHED AND GENERATOR LOCATION...

LIST OF DRAWINGS:

Table with 2 columns: Drawing No. and Drawing Title. Lists drawings P-1 through P-5.

OPTIONAL STANDBY GENERATOR SCHEDULE

Table with 6 columns: Symbol, Location, Equipment Description, Fuel Type, Natural Gas Fuel Consumption Rate, CFH, and Manufacturer & Model Number. Lists two generator options G1 and G2.

Table with 3 columns: Rev No., Description, Date. Shows revision history.

New York Rising Community Reconstruction Program



GOSR Governor's Office of Storm Recovery

GOSR Program GENERATOR REPLACEMENT VILLAGE OF SUFFERN ROCKLAND COUNTY, NEW YORK

Drawing Title PLUMBING GENERAL NOTES AND SCHEDULES

Phase BID SET

Drawn By: JJ, Checked By: NS, Date: 05/21/2021

Seal & Signature

Professional Engineer Seal for the State of New York, and Drawing Number P-1, Sheet # 9 of 15.

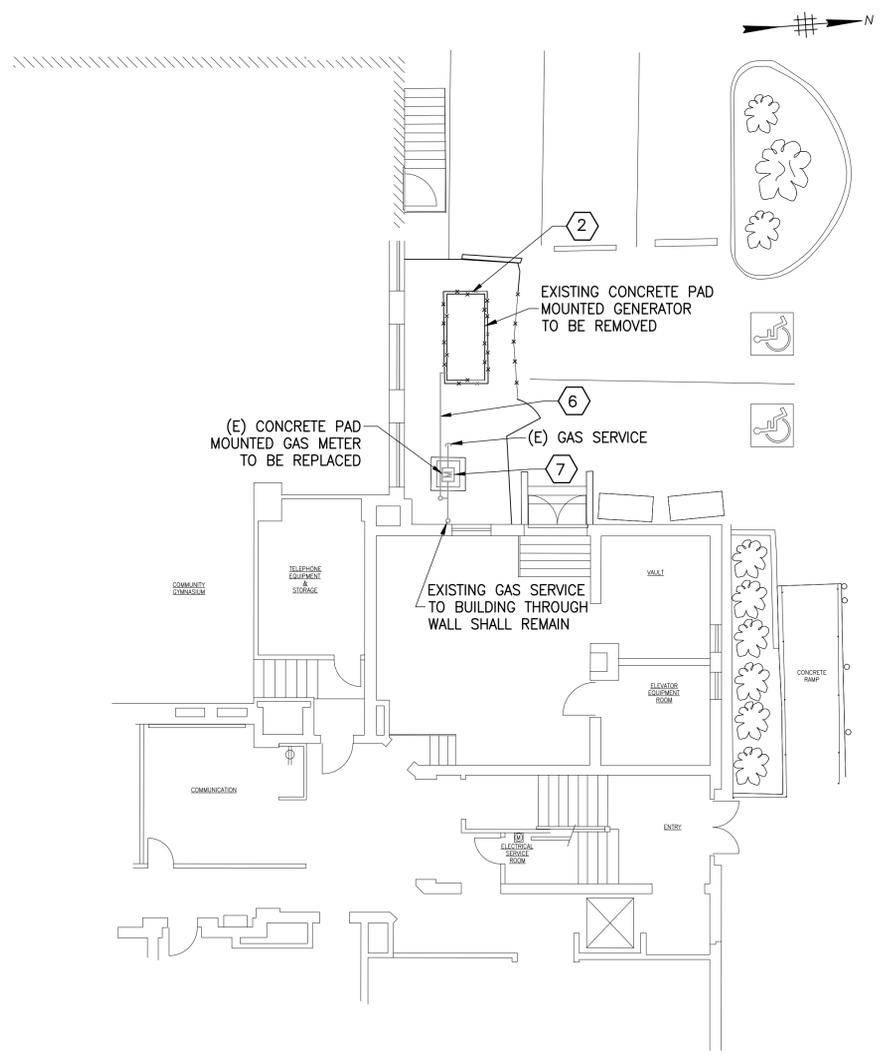


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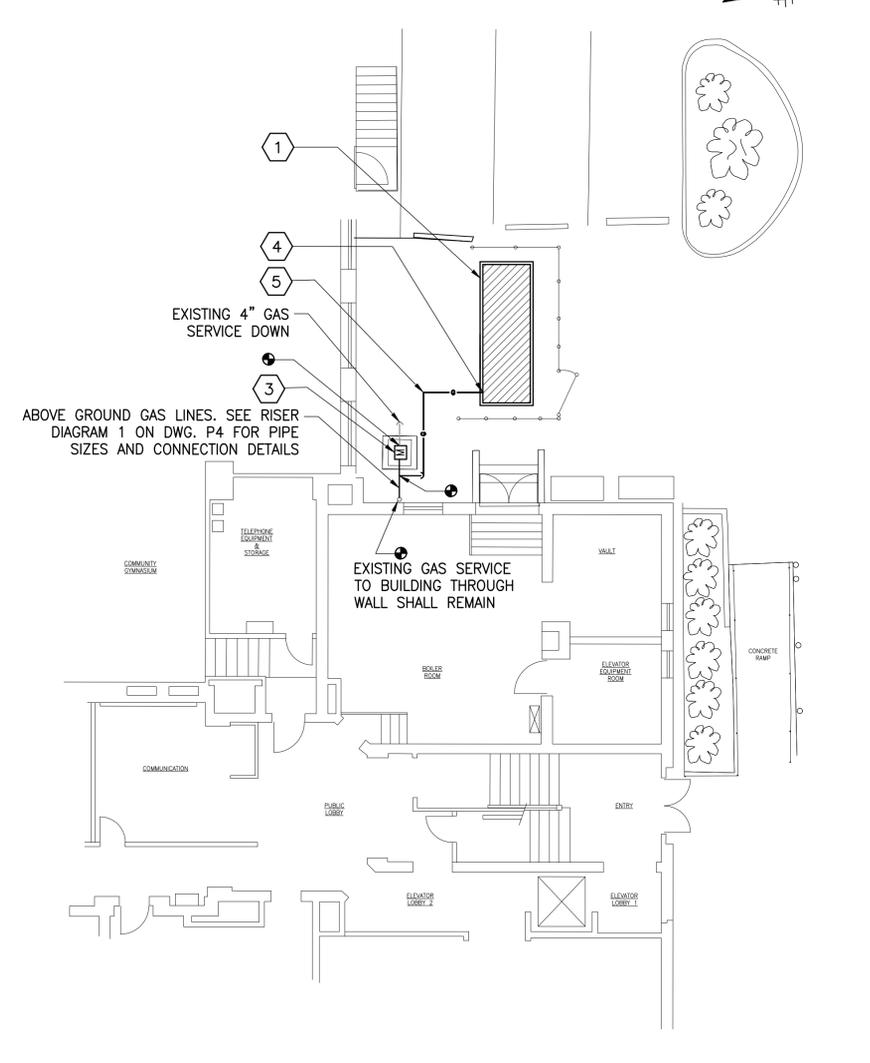


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1 VILLAGE HALL FIRST FLOOR AND SITE DEMOLITION PLAN
 P-2 SCALE: N.T.S.



2 VILLAGE HALL FIRST FLOOR AND SITE PROPOSED PLAN
 P-2 SCALE: N.T.S.

SITE PLAN NOTES:

- FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS REFER TO DRAWING NO. P-001. FOR GENERATOR SCHEDULE REFER TO DRAWING NO. E-1.
- PROVIDE FACTORY ASSEMBLED ANODELESS RISER TRANSITION FITTINGS FROM UNDERGROUND HDPE PIPE TO ABOVE GROUND STEEL PIPING.
- SEE NATURAL GAS PIPE RISER DIAGRAM 1 ON DWG. P-4.
- SEE DETAIL 2 ON DWG. P-5 FOR THE UNDERGROUND PIPING TRENCH DETAIL.
- SEE DETAIL 1 ON DWG. P-5 FOR GAS TRAIN PIPING.

DRAWING PLAN KEY NOTES:

- PROPOSED G1, 175KW STANDBY GENERATOR LOCATED ON CONCRETE PAD. FINAL LOCATION TO BE COORDINATED WITH THE BUILDING OWNER, PRIOR TO ANY INSTALLATION WORK. SEE GENERATOR SCHEDULE ON DWG. P-1. SEE DETAIL 1 AND 2 ON DWG. S-2 FOR GENERATOR BASE CONCRETE PAD.
- EXISTING GENERATOR SHALL BE REMOVED BY ELECTRICAL CONTRACTOR. PLUMBING CONTRACTOR SHALL REMOVE ALL ASSOCIATED GAS PIPING. PROVIDE TEMPORARY GAS PIPING AS REQUIRED TO KEEP THE EXISTING GENERATOR OPERATIONAL, UNTIL PROPOSED GENERATOR IS INSTALLED AND OPERATIONAL.
- UPGRADE GAS METER AS PER UTILITY COMPANY REQUIREMENTS. COORDINATE WITH UTILITY COMPANY. PROVIDE PRESSURE REGULATORS IN COMPLIANCE WITH SECTION FG-410 OF NYSFGC. PROVIDE GENERATOR GAS TRAIN IN COMPLIANCE WITH NFPA 37 AND GENERATOR MANUFACTURER'S REQUIREMENTS. SEE RISER DIAGRAM 1 ON DWG. P-4 FOR PIPE SIZES AND CONNECTION DETAILS.
- PROVIDE GAS SHUT-OFF VALVE ADJACENT TO GENERATOR ENCLOSURE.
- PROVIDE FROM THE GAS METER TO THE GENERATOR, 3" HDPE PIPE WITH PIPE SLEEVE FOR UNDERGROUND PORTION OF THE PIPE AND 3" SCHEDULE 40 BLACK STEEL PIPE FOR ABOVE GROUND PORTION OF THE PIPE. MAKE FINAL CONNECTION TO THE GENERATOR USING FUEL LINE FLEXIBLE PIPE SUPPLIED BY THE GENERATOR MANUFACTURER. PROVIDE PIPE REDUCER AS REQUIRED. FOLLOW GENERATOR MANUFACTURER'S INSTALL MANUAL. SEE DETAIL 2 ON DWG. P-5 FOR THE UNDERGROUND PIPING TRENCH DETAIL.
- AFTER THE NEW GENERATOR G1 HAS BEEN INSTALLED, TESTED AND MADE OPERATIONAL REMOVE THE EXISTING 2" GAS LINE SERVING THE EXISTING 35 KW GENERATOR AND CAP THE LINE AT THE METER. PROVIDE TEMPORARY GAS PIPING AS REQUIRED TO KEEP THE EXISTING GENERATOR OPERATIONAL, UNTIL PROPOSED GENERATOR IS INSTALLED AND OPERATIONAL.
- REMOVE EXISTING GAS METER AND ASSOCIATED VALVES. REPLACE WITH UPDATED GAS METER, ALONG WITH NEW SHUT OF VALVES AND GENERATOR GAS REGULATOR. SEE GAS RISER DIAGRAM NO. 1 ON DRAWING P-4.

REVISIONS

Rev No	Description	Date
1		
2		
3		
4		

New York Rising Community Reconstruction Program



GOSR
 Governor's Office of Storm Recovery

Project Title
GOSR Program
 GENERATOR REPLACEMENT
 VILLAGE OF SUFFERN
 ROCKLAND COUNTY, NEW YORK

Drawing Title
PLUMBING
 SUFFERN VILLAGE HALL
 FLOOR & SITE PLANS

Phase
BID SET
 Drawn By: JJ Checked By: NS Date: 05/21/2021

Seal & Signature

 Drawing Number
P-2
 Sheet #
 10 of 15

BID ALTERNATE NO. 1

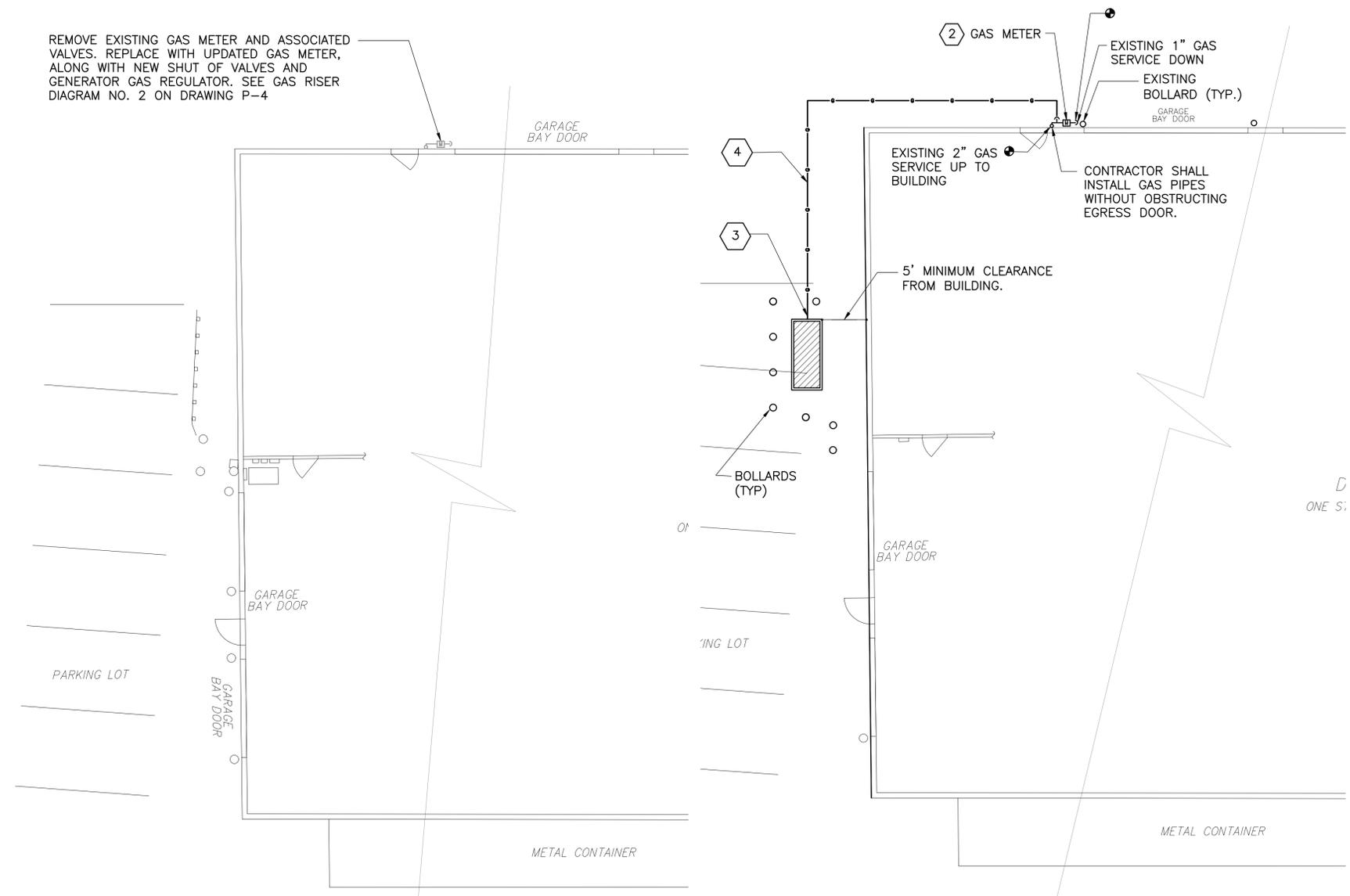


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REMOVE EXISTING GAS METER AND ASSOCIATED VALVES. REPLACE WITH UPDATED GAS METER, ALONG WITH NEW SHUT OFF VALVES AND GENERATOR GAS REGULATOR. SEE GAS RISER DIAGRAM NO. 2 ON DRAWING P-4



GENERAL NOTES:

1. FOR GENERAL NOTES, SYMBOLS, ABBREVIATIONS AND EQUIPMENT SCHEDULE REFER TO DRAWING NO. P-1.
2. SEE DWG. S-1 FOR PAVEMENT RESTORATION DETAILS.

DRAWING PLAN KEY NOTES:

1. PROPOSED G2, 208/120V, 3-PHASE, 4-WIRE, 50KW OPTIONAL STANDBY GENERATOR ON CONCRETE PAD. SEE DETAIL 1 & 2 ON DWG. S-2 FOR GENERATOR BASE CONCRETE PAD.
2. UPGRADE GAS METER. PROVIDE GAS REGULATOR FOR GENERATOR FUEL LINE. SEE RISER DIAGRAM 2 ON DWG. P-4 FOR PIPE SIZES AND CONNECTION DETAILS. COORDINATE WITH UTILITY COMPANY.
3. PROVIDE GAS SHUT-OFF VALVE ADJACENT TO GENERATOR ENCLOSURE.
4. PROVIDE FROM THE GAS METER TO THE GENERATOR, 2-1/2" HDPE PIPE WITH PIPE SLEEVE FOR UNDERGROUND PORTION OF THE PIPE AND 2-1/2" SCHEDULE 40 BLACK STEEL PIPE FOR ABOVE GROUND PORTION OF THE PIPE. MAKE FINAL CONNECTION TO THE GENERATOR USING FUEL LINE FLEXIBLE PIPE SUPPLIED BY THE GENERATOR MANUFACTURER. PROVIDE PIPE REDUCER AS REQUIRED. FOLLOW GENERATOR MANUFACTURER'S INSTALL MANUAL. SEE DETAIL 3 ON DWG. P-5 FOR THE UNDERGROUND PIPING TRENCH DETAIL.

Rev No	Description	Date:
1		
2		
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New York Rising Community Reconstruction Program

 GOSR
 Governor's Office of Storm Recovery
 Project Title
GOSR Program
 GENERATOR REPLACEMENT
 VILLAGE OF SUFFERN
 ROCKLAND COUNTY, NEW YORK

1 DPW GARAGE DEMOLITION PLAN
 SCALE: 1/8"=1'-0"

2 DPW GARAGE PROPOSED PLAN
 SCALE: 1/8"=1'-0"

Drawing Title
PLUMBING
 SUFFERN DPW GARAGE
 FLOOR & SITE PLANS

Phase
BID SET

Drawn By: **JJ** Checked By: **NS** Date: **05/21/2021**

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Drawing Number
P-3

Sheet #
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VILLAGE OF SUFFERN

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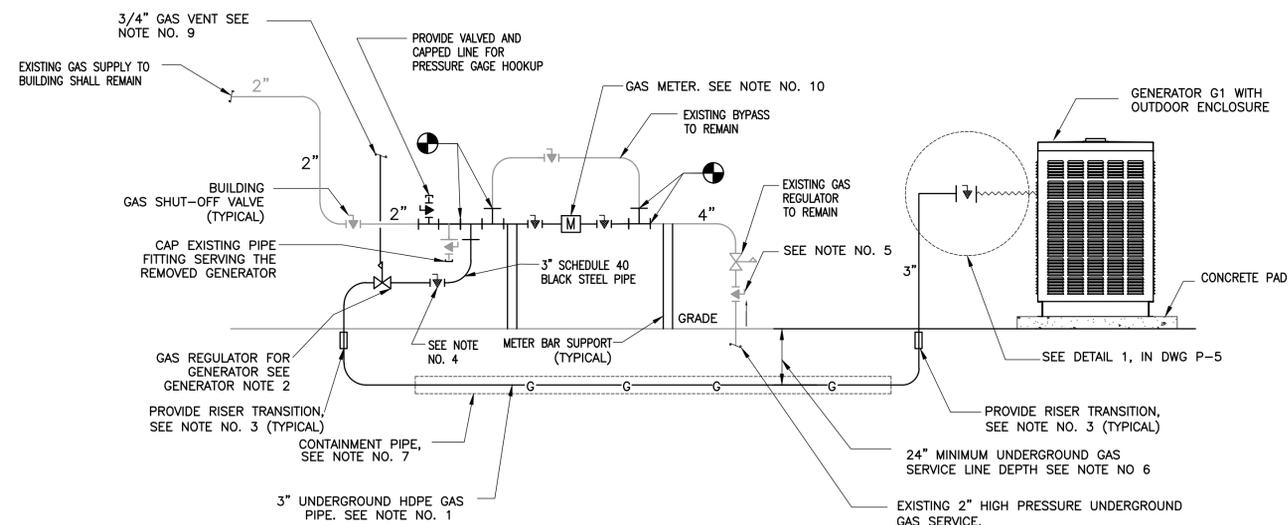
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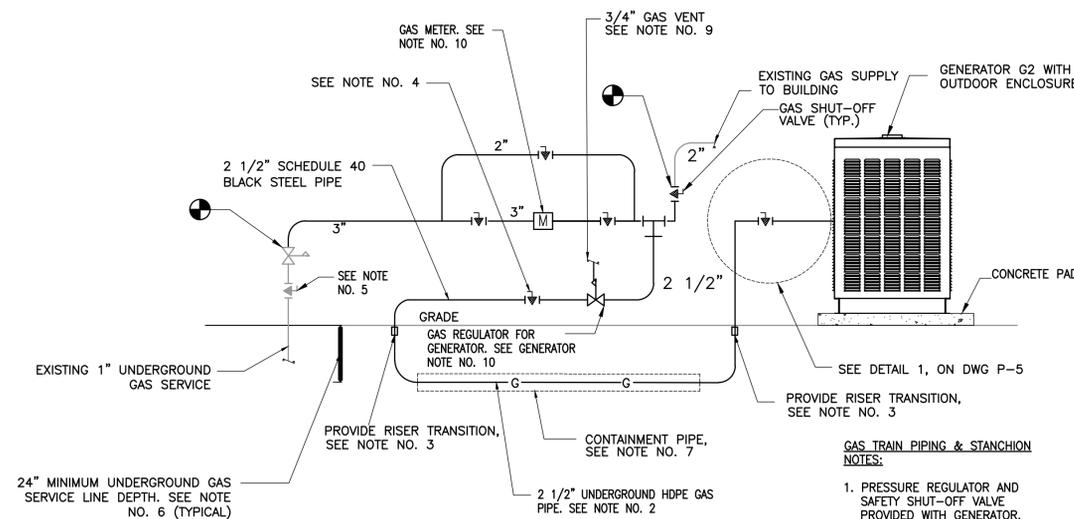
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1 VILLAGE HALL NATURAL GAS RISER DIAGRAM
P-4 (BID ALTERNATE NO. 1) SCALE: NTS



2 DPW NATURAL GAS RISER DIAGRAM
P-4 SCALE: NTS

- GAS TRAIN PIPING & STANCHION NOTES:**
1. PRESSURE REGULATOR AND SAFETY SHUT-OFF VALVE PROVIDED WITH GENERATOR.
 2. SAFETY SHUT-OFF VALVES WILL BE PROVIDED WITH AN INTEGRAL LEAK TEST PORT.

NATURAL GAS PIPE NOTES:

1. FOR THE VILLAGE HALL GENERATION G1 PROVIDE FROM THE GAS METER TO THE GENERATOR, 3" HDPE PIPE WITH PIPE SLEEVE FOR UNDERGROUND PORTION OF THE PIPE AND 3" SCHEDULE 40 BLACK STEEL PIPE FOR ABOVE GROUND PORTION OF THE PIPE. MAKE FINAL CONNECTION TO THE GENERATOR USING FUEL LINE FLEXIBLE PIPE SUPPLIED BY THE GENERATOR MANUFACTURER. PROVIDE PIPE REDUCER AS REQUIRED. FOLLOW GENERATOR MANUFACTURER'S INSTALLATION MANUAL.
2. FOR THE DPW BUILDING GENERATION G2 PROVIDE FROM THE GAS METER TO THE GENERATOR, 2 1/2" HDPE PIPE WITH PIPE SLEEVE FOR UNDERGROUND PORTION OF THE PIPE AND 2 1/2" SCHEDULE 40 BLACK STEEL PIPE FOR ABOVE GROUND PORTION OF THE PIPE. MAKE FINAL CONNECTION TO THE GENERATOR USING FUEL LINE FLEXIBLE PIPE SUPPLIED BY THE GENERATOR MANUFACTURER. PROVIDE PIPE REDUCER AS REQUIRED. FOLLOW GENERATOR MANUFACTURER'S INSTALLATION MANUAL.
3. PROVIDE FACTORY ASSEMBLED ANODELESS RISER TRANSITION FITTINGS FROM UNDERGROUND HDPE PIPE TO ABOVE GROUND STEEL PIPING.
4. PROVIDE SIGNAGE ON THE VALVE INDICATING, GENERATOR GAS SHUTOFF VALVE. THERE IS ANOTHER VALVE SERVING THE BUILDING.
5. PROVIDE SIGNAGE ON THE VALVE INDICATING, MAIN GAS SHUTOFF VALVE.
6. INSTALL UNDERGROUND, NATURAL-GAS PIPING BURIED AT LEAST 24 INCHES BELOW FINISHED GRADE.
7. UNDERGROUND NATURAL GAS PIPING SHALL BE INSTALLED IN 5" PVC SCHEDULE 80 CONTAINMENT PIPE.
8. SEE SPECIFICATION SECTION 221123 FOR NATURAL GAS PIPING REQUIREMENTS.
9. THE CONTRACTOR SHALL VERIFY WITH THE PRESSURE REGULATOR MANUFACTURERS IF THE SERVICE AND LINE PRESSURE REGULATORS WOULD REQUIRE EXTERNAL VENT PIPING AS SHOWN AND INSTALL AS PER MANUFACTURER'S REQUIREMENTS. INSTALL VENT PIPING WITH A SUITABLE TERMINATION DEVICE (E.G. VENT PROTECTOR) TO PREVENT THE ENTRY OF INSECTS, WATER OR FOREIGN OBJECTS AS REQUIRED PER THE NYS RESIDENTIAL CODE, SECTION 2421.3. TERMINATE THE VENT LINE AT LEAST 18" AWAY FROM ANY BUILDING OPENINGS. GAS PIPE VENT SHALL NOT BE SMALLER THAN THE CONNECTION SIZE AT THE PRESSURE REGULATOR.
10. UPGRADE GAS METER AS PER UTILITY COMPANY REQUIREMENTS. COORDINATE WITH UTILITY COMPANY. PROVIDE PRESSURE REGULATORS IN COMPLIANCE WITH SECTION FG-410 OF NYSFGC. PROVIDE GENERATOR GAS TRAIN IN COMPLIANCE WITH NFPA 37 AND GENERATOR MANUFACTURER'S REQUIREMENTS.
11. ABOVE GROUND HORIZONTAL PIPING SHALL NOT BE LOCATED BELOW 3-1/2" ABOVE GROUND.

GENERATOR NOTES:

1. SEE DWG. P-1 FOR BASIS OF DESIGN GENERATOR MANUFACTURER AND MODEL NUMBERS.
2. FOR G1 175KW GENERATOR FUEL CONSUMPTION @ FULL LOAD FOR NATURAL GAS IS 2340 (CU. FT/HR). GENERATOR OPERATING FUEL PRESSURE FOR NATURAL GAS IS 7"-11" WC FOR NATURAL GAS.
3. FOR G2 50KW GENERATOR FUEL CONSUMPTION @ FULL LOAD FOR NATURAL GAS IS 879 (CU. FT/HR). GENERATOR OPERATING FUEL PRESSURE IS 7"-11" WC.

REVISIONS

Rev No	Description	Date
1		
2		
3		
4		

New York Rising Community Reconstruction Program



GOSR
Governor's Office of Storm Recovery

Project Title
GOSR Program
GENERATOR REPLACEMENT
VILLAGE OF SUFFERN
ROCKLAND COUNTY, NEW YORK

Drawing Title
PLUMBING
SUFFERN VILLAGE HALL & DPW
GAS RISER DIAGRAM

Phase
BID SET
Drawn By: JJ
Checked By: NS
Date: 05/21/2021

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Drawing Number
P-4
Sheet #
12 of 15



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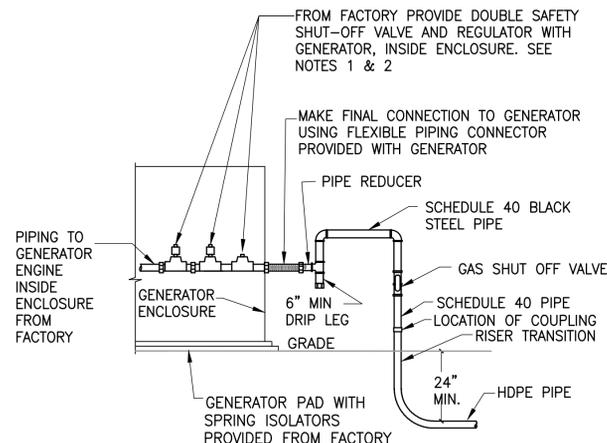
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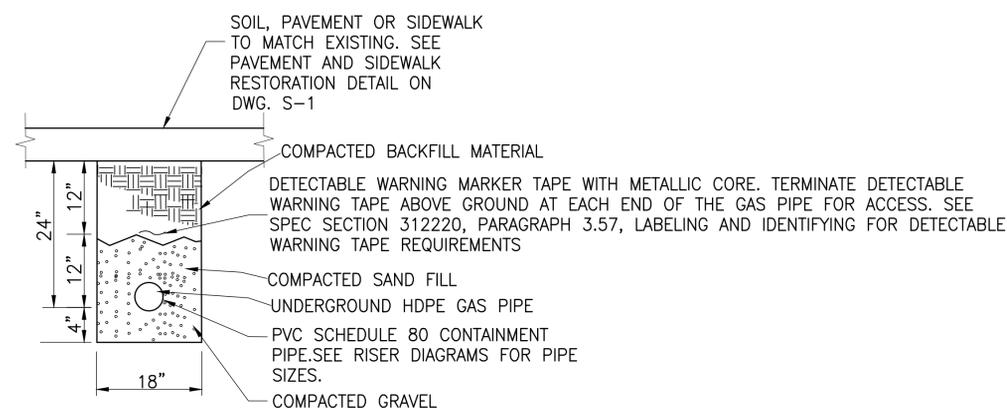
GAS TRAIN PIPING & STANCHION NOTES:

- 1. PRESSURE REGULATOR AND SAFETY SHUT-OFF VALVE PROVIDED WITH GENERATOR.
- 2. SAFETY SHUT-OFF VALVES WILL BE PROVIDED WITH AN INTEGRAL LEAK TEST PORT.
- 3. PROVIDE A GAS FILTER OR STRAINER.

1 NATURAL GAS TRAIN PIPING & STANCHION DETAIL

P-5

SCALE: N.T.S



2 NATURAL GAS PIPING TRENCH DETAIL

P-5

SCALE: N.T.S

Table with 3 columns: Rev No, Description, Date. Contains three rows of revision markers.

New York Rising Community Reconstruction Program



GOSR Governor's Office of Storm Recovery

Project Title

GOSR Program

GENERATOR REPLACEMENT
VILLAGE OF SUFFERN
ROCKLAND COUNTY, NEW YORK

Drawing Title

PLUMBING DETAILS

Phase

BID SET

Drawn By: JJ Checked By: NS Date: 05/21/2021

Seal & Signature



Drawing Number

P-5

Sheet # 13 of 15



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FENCE AND GATE NOTES:

- REFER TO ELECTRICAL SITE PLAN(S) FOR SIZING AND LOCATION.
- AREA BETWEEN CONCRETE PAD AND 12" BEYOND FENCE TO BE COVERED IN WEED BARRIER FABRIC FOLLOWED BY 4" OF #4 CRUSHED STONE.
- REFER TO TECHNICAL SPEC 313113 FOR "CHAIN LINK FENCES AND GATES."
- LOCK FOR THE GATE WILL BE PROVIDED BY THE FACILITY.
- PROVIDE GREEN SLATS FOR ALL 3 SIDES OF FENCING AROUND THE GENERATOR.
- SEE FENCE & GATE GROUNDING & BONDING DETAIL 3 ON DWG. E-7 (TYP.)

TRENCHING AND RESTORATION NOTES:

- ALL TRENCHES SHALL BE BACKFILLED.
- BACKFILL MATERIAL SHALL BE DEPOSITED IN HORIZONTAL LAYERS NOT EXCEEDING 12" IN THICKNESS PRIOR TO COMPACTION. A MINIMUM OF 95% OF STANDARD MAXIMUM DENSITY WILL BE REQUIRED WHEN PLACING BACKFILL. LAYERS SHALL BE DEPOSITED TO PROGRESSIVELY BURY THE DUCTBANK TO EQUAL DEPTHS ON BOTH SIDES. COMPACTION SHALL BE ACHIEVED BY THE USE OF IMPACT HAMMERS, PLATE ON SMALL DRUM VIBRATORS OR PNEUMATIC BUTTON HEAD COMPACTION EQUIPMENT. HAND TAMPING IS NOT PERMITTED EXCEPT IN THE IMMEDIATE AREA OF THE UNDERGROUND UTILITY.
- THE OUTLINE OF THE PATCH SHALL BE CUT SQUARE BY SAW CUTTING TO A DEPTH OF TWO INCHES (2") AT A MINIMUM DISTANCE OF 1'-0" FROM ALL EDGES OF THE EXCAVATION. THE BREAKUP WITH PNEUMATIC HAMMERS TO BEGIN AT THE CENTER OF THE PATCH AREA, NOT AT THE SAW CUTS. IF THE CONTRACTOR SPALLS THE CONCRETE DURING THE REMOVAL, HE MUST MAKE A NEW SAW CUT OUTSIDE THE SAWED AREA, REMOVE AND REPLACE THE CONCRETE WITHOUT ADDITIONAL COMPENSATION.
- RESTORE ALL PAVEMENT, SIDEWALK AND LANDSCAPE EXCAVATED TO ORIGINAL CONDITION. THE EXTENT OF RESTORATION IS NOT LIMITED TO WHAT IS SHOWN ON THIS DRAWING. RESTORE ALL SURFACES DISTURBED DURING EXCAVATION TO ORIGINAL CONDITION. PROVIDE SODDING FOR ENTIRE GRASS AREAS DISTURBED DURING TRENCHING AND RESTORATION.
- RESTORE INTERIOR AND EXTERIORS WALLS DISTURBED DURING THE PROJECT.

REVISIONS

Rev No	Description	Date
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3		
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New York Rising Community Reconstruction Program



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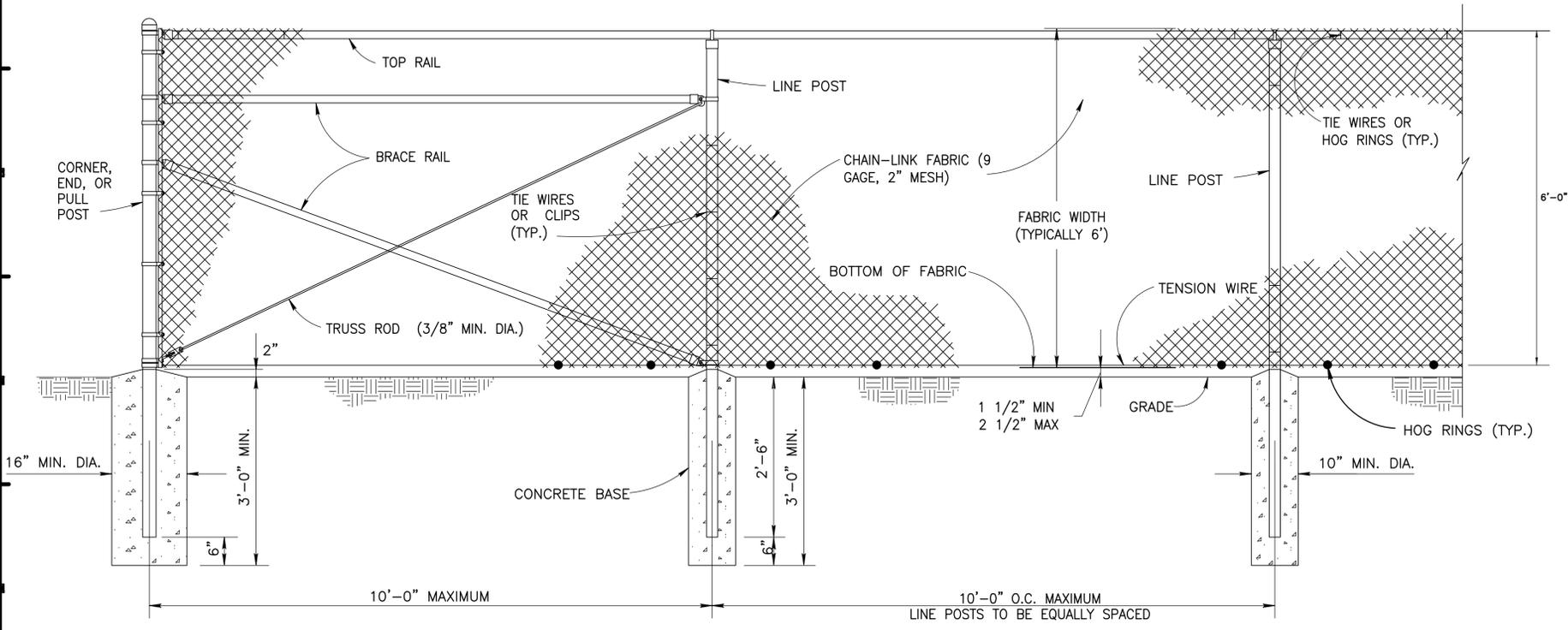
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GOSR Program
 GENERATOR REPLACEMENT
 VILLAGE OF SUFFERN
 ROCKLAND COUNTY, NEW YORK

Drawing Title
**STRUCTURAL
 DETAILS 1 OF 2**

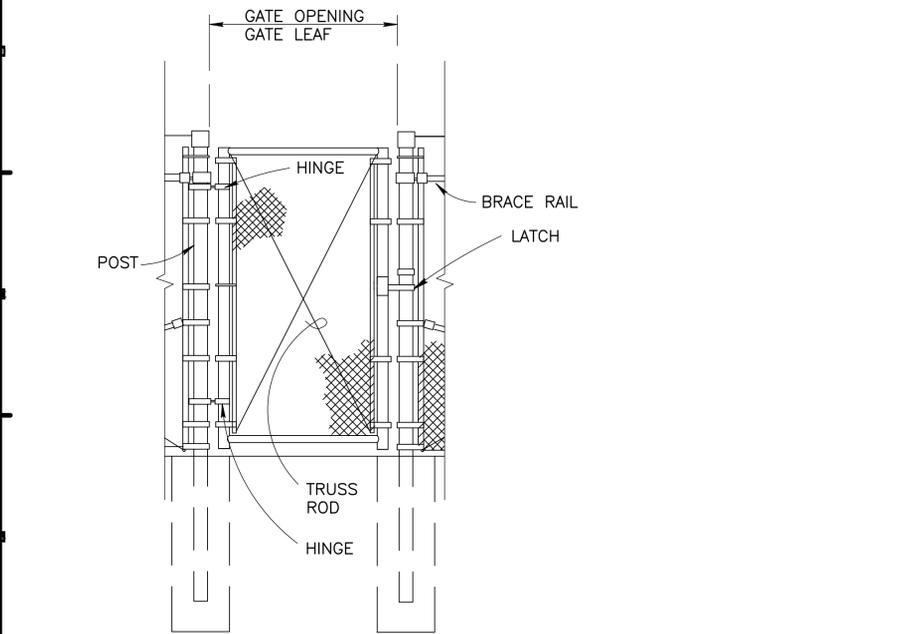
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BID SET
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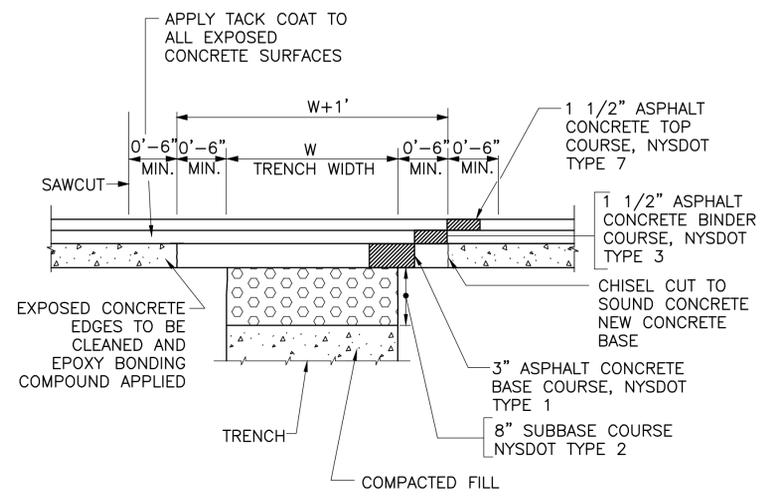
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S-1
 Sheet #
 14 of 15



1
 S-1
CHAIN LINK SECURITY FENCE DETAIL
 (BID ALTERNATE NO. 1) SCALE: N.T.S.



2
 S-1
CHAIN LINK SECURITY FENCE DETAIL
 (BID ALTERNATE NO. 1) SCALE: N.T.S.



3
 S-1
PAVEMENT RESTORATION DETAIL
 SCALE: N.T.S.

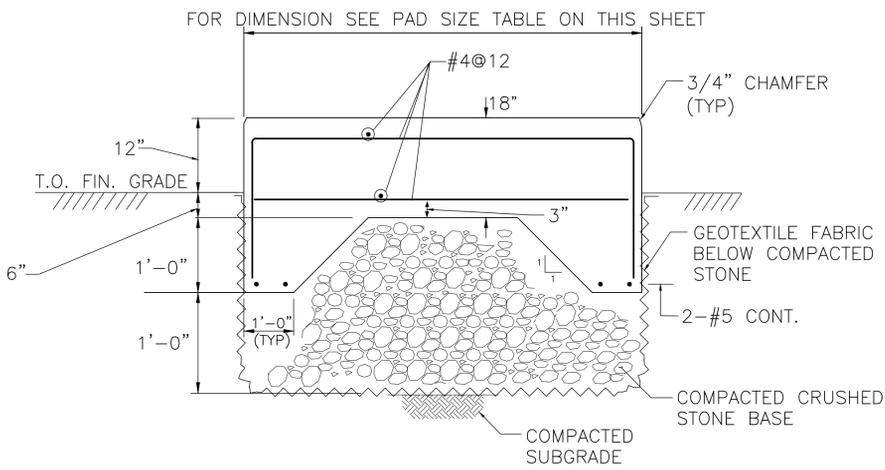


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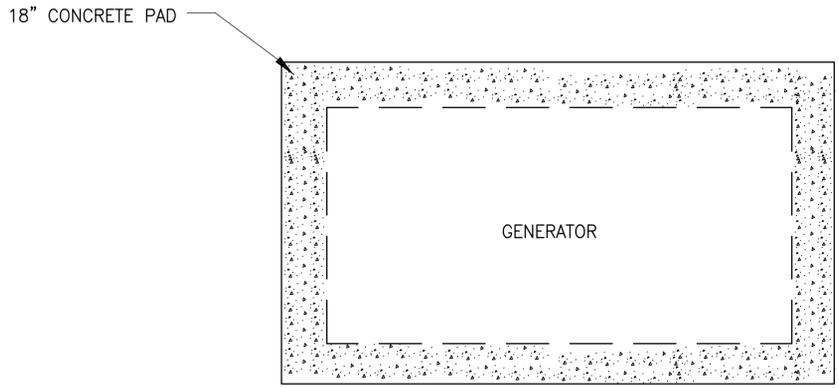
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1
 S-2
GENERATOR CONCRETE PAD DETAIL
 SCALE: N.T.S.



2
 S-2
GENERATOR CONCRETE PAD DETAIL PLAN
 SCALE: N.T.S.

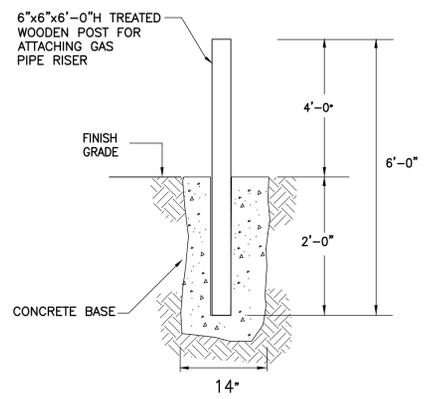
PAD SIZE TABLE			ADDITIONAL INFORMATION	
LOCATION	PROPOSED PAD LENGTH	PROPOSED PAD WIDTH	GENERATOR SET WEIGHT	GENERATOR DIMENSION (LxWxH)
VILLAGE HALL	162"	60"	7,236 LBS	155" x 54" x 94"
DPW	107"	50"	2,928 LBS	95" x 38" x 62"

*ALL MEASUREMENTS ARE APPROXIMATE AND FOR ESTIMATION PURPOSES ONLY. CONTRACTOR SHALL OBTAIN ACTUAL DIMENSIONS OF THE GENERATOR, FROM THE MANUFACTURER.

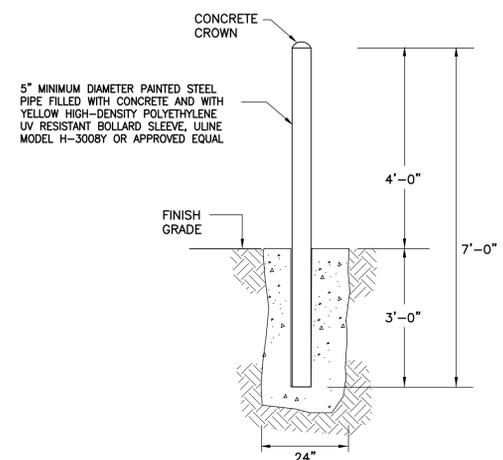
CONCRETE PAD NOTES:

- ALL SLAB-ON-GROUND CONCRETE PAD SHALL BE POURED ONCE.
- DOWELS MAY BE DRILLED INTO SLAB AT CONTRACTOR'S OPTION. PROVIDE HILTI HY150 ADHESIVE W/ 4" MIN. EMBEDMENT. ALLOW CONCRETE TO CURE A MIN. 72 HOURS PRIOR TO DRILLING.
- CONCRETE SHALL BE MINIMUM COMPRESSIVE STRENGTH: 4,000 PSI AT 28 DAYS.
- MINIMUM COVERAGE OF THE CONCRETE REINFORCEMENT SHALL BE 3" CONCRETE COVER.

REVISIONS		
Rev No	Description	Date



3
 S-2
WOOD POST BASE DETAIL
 SCALE: N.T.S.



NOTES FOR BOLLARDS:
 1. THE BARRIER POSTS SHALL BE 7'-0" IN LENGTH 5" MINIMUM DIAMETER PAINTED STEEL PIPE FILLED WITH CONCRETE. SET AT A DEPTH OF 3'-0" BELOW FINAL GRADE AND ENCASED IN A 24" DIA. CONCRETE BASE. PROVIDE YELLOW HIGH-DENSITY POLYETHYLENE UV RESISTANT BOLLARD SLEEVE ULINE MODEL H-3008Y OR APPROVED EQUAL.

4
 S-2
BOLLARD DETAIL
 SCALE: N.T.S.

New York Rising Community Reconstruction Program

 GOSR
 Governor's Office of Storm Recovery
 Project Title
GOSR Program
 GENERATOR REPLACEMENT
 VILLAGE OF SUFFERN
 ROCKLAND COUNTY, NEW YORK

Drawing Title
STRUCTURAL DETAILS 2 OF 2
 Phase
 BID SET
 Drawn By: JJ NS
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 Date: 05/21/2021
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 Drawing Number
 S-2
 Sheet #
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