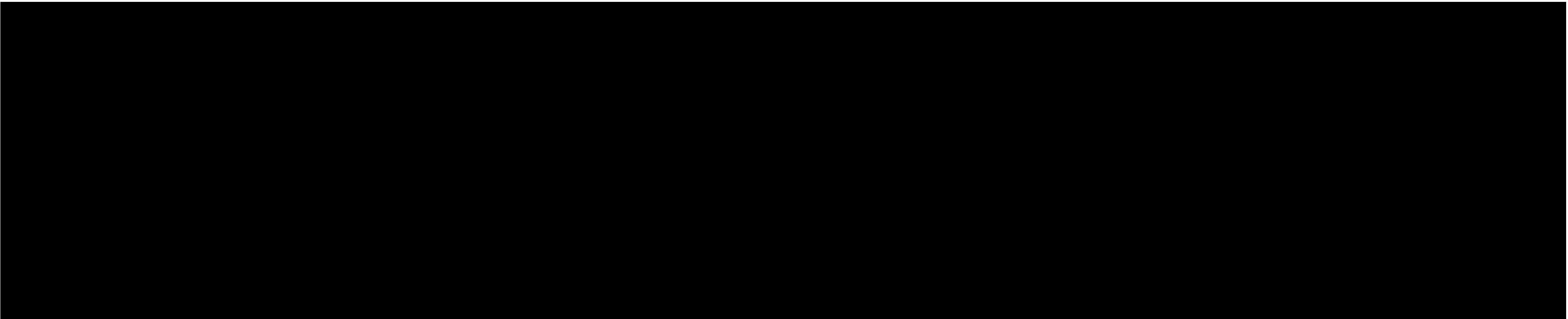


REVISIONS				
SYM	DESCRIPTION	PREPARED BY	DATE	APPROVED

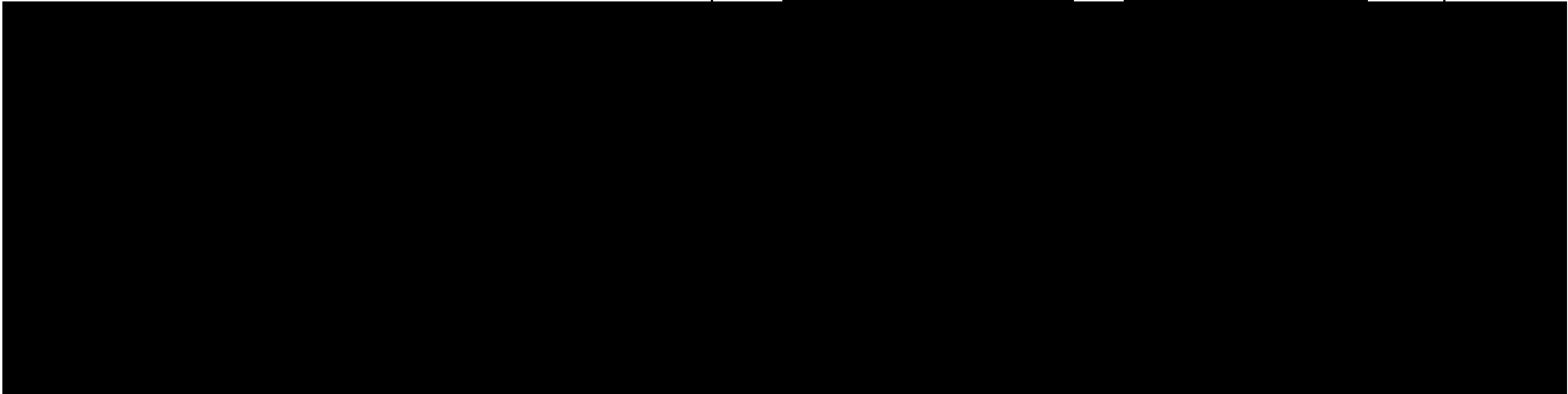
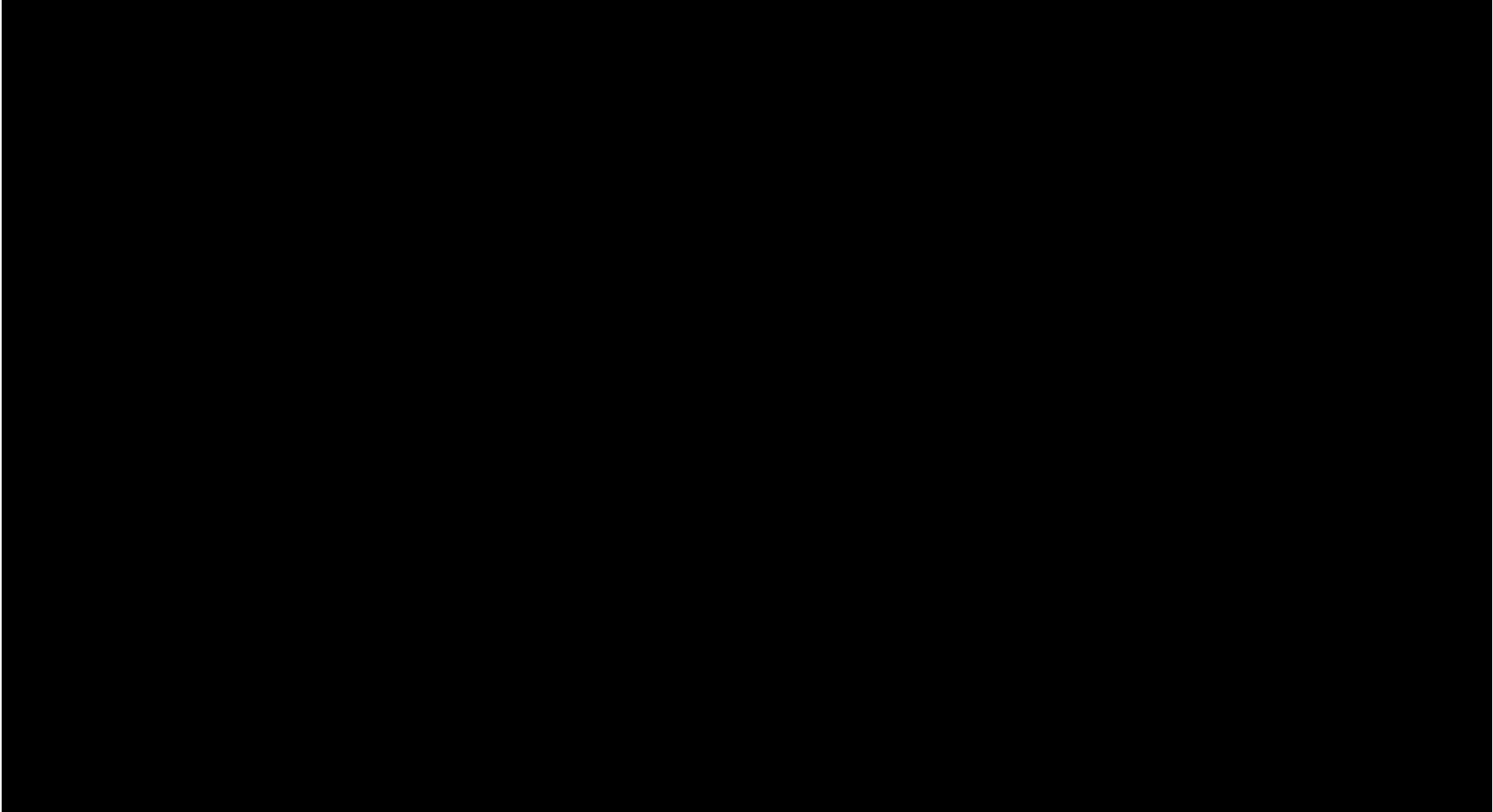
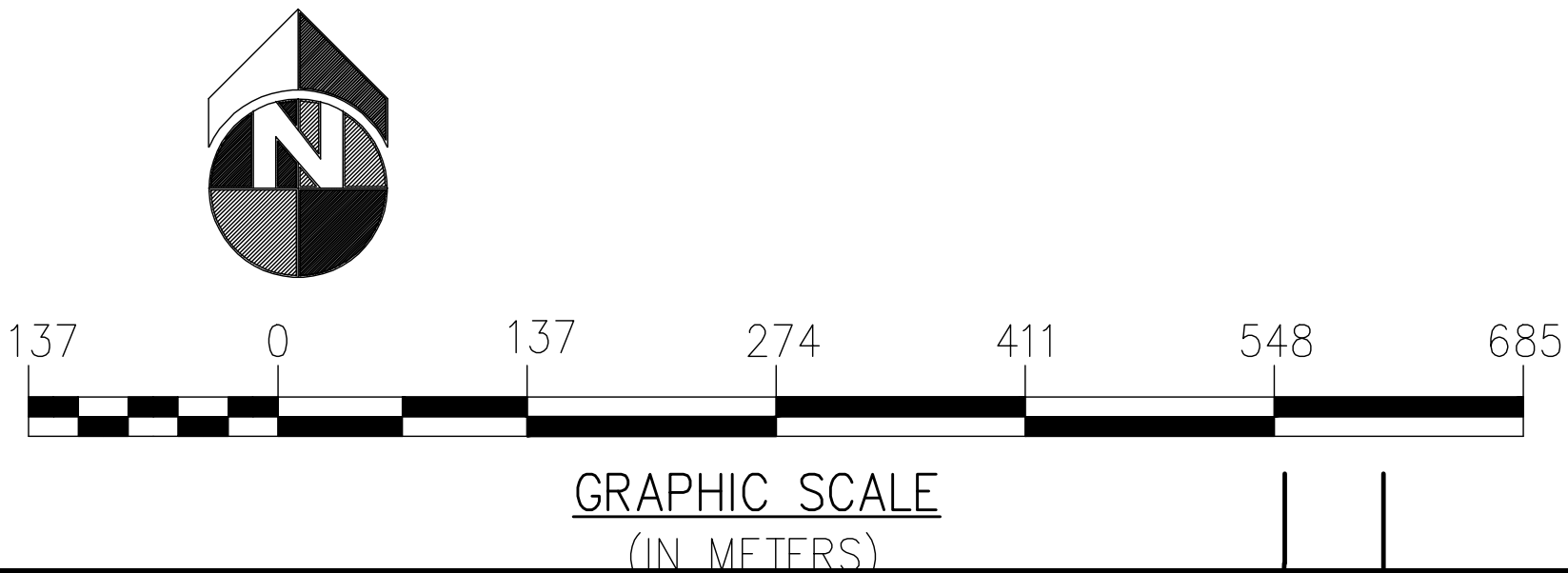


# METHANE GAS CONTROL

SPECIFIC METHANE MITIGATION SHOWN ON THESE PLANS

1. STRUCTURAL VENTING SYSTEMS
  - vent trenches nominally 7620mm on center
  - vent piping perforations nominal 5% open area
  - vent piping under slab minimum 102mm diameter
  - vent trench backfilled rock
  - vent risers minimum 75mm diameter iron, per UPC
  - vent risers equipped with rain guard
  - vent risers clearly identified on walls as "gas"
  - vent risers 914mm above roof or 3050mm above grade
  - vent risers 3050mm from any air intake or opening to building
  - warning signage or gas identification tape at each vent riser
2. STRUCTURAL VAPOR BARRIERS
  - minimum thickness 60 mils beneath all enclosed structures
  - acceptable materials hdpe or liquid boot or other approved
  - protected from concrete pour
  - all penetrations to be booted per engineered details
  - qualified experienced membrane contractor to install barrier
  - deputy inspection required
  - warning signs posted cautioning against future slab cuts
3. STRUCTURAL METHANE DETECTION
  - system on emergency power or 24 hour battery backup
  - non-local switch with lock-out or tag-out
  - audible-visual alarm combinations to alert all occupants
  - audible alarms minimum 10 db above ambient noise levels
  - emergency procedures signage at all alarms
  - alarm set point at 25% l.e.l. (1.25% by volume as methane)
  - calibration/maintenance, records kept in panel
  - map of detector system signage at panel
  - emergency procedures signage at panel
  - emergency phone numbers for system operation-repair at panel
  - all detectors on 24-hour supervised circuits
  - if central station monitored, methane signal to be distinct
  - if on-site monitored, emergency training of 24-hour guard
  - emergency training of all building operational personnel
  - panel located exterior or visible without entering structure
  - panel located at address side of structure
  - no reset unless gas levels diminished below alarm set points
  - system to be field performance tested prior to occupancy
4. PAVED AREA VENT SYSTEMS
  - vent trenches minimum 304mm wide by 304mm deep
  - vent trenches location/spacing per engineer
  - vent piping perforations nominal 5% open area
  - vent piping under pavement minimum 102mm diameter
  - vent trench backfill pea rock
  - vent trench wrapped with geo-cloth against subgrade
  - vent risers minimum 75mm diameter iron or steel
  - vent risers equipped with rain guard
  - vent risers in yard 3050mm above grade, protected from traffic
  - vent risers 3050mm from any air intake or opening to building
  - vent risers 1219mm from property line
  - vent risers 3050mm clear of outdoor lighting or electrical
  - warning signage at each vent riser
5. ELECTRICAL CONDUIT
  - Class 1 Division 2 under building
  - Unclassified inside protected structures or above membrane
6. YARD VAULTS
  - prevent methane intrusion into confined spaces on grade; or
  - allow for venting of methane from confined spaces on grade

LOCATION MAP



LIST OF DRAWINGS

- GC-1 TITLE SHEET and NOTES
- GC-2 HARDSCAPE VENTING PLAN
- GC-3 HARDSCAPE VENTING DETAILS
- GC-4 SUBSLAB VENT PIPING AND MEMBRANE PLAN
- GC-5 SUBSLAB VENTING DETAILS
- GC-6 SUBSLAB MEMBRANE DETAILS
- GC-7 SUBSLAB MEMBRANE SPECIFICATIONS
- GC-8 ELECTRONIC GAS DETECTION PLAN
- GC-9 GAS DETECTION DETAILS
- GC-10 GAS DETECTION SPECIFICATIONS
- GC-11 CLASSIFIED AREAS

APPROVALS

GC-1

IF SHEET IS LESS THAN 28"x42", IT IS A REDUCED PRINT. SCALE REDUCED ACCORDINGLY.

MEDICAL/DENTAL CLINIC

TITLE SHEET AND NOTES

SIZE: F

CODE IDENT. NO. XXXXX

DRAWING NO. 8144525

CONST. CONTR. NO.

SCALE:

SPEC. 11996048

SHEET 20 OF 316