

LEGEND

- EXISTING FEATURES**
- SANITARY MANHOLE
 - STORM INLET
 - FIRE HYDRANT
 - WATER VALVE
 - UTILITY POLE
 - SIGN
 - SANITARY SEWER
 - UNDERGROUND WATER LINE
 - UNDERGROUND GAS LINE
 - AERIAL ELECTRIC LINE
 - FENCE LINE
 - STORM SEWER

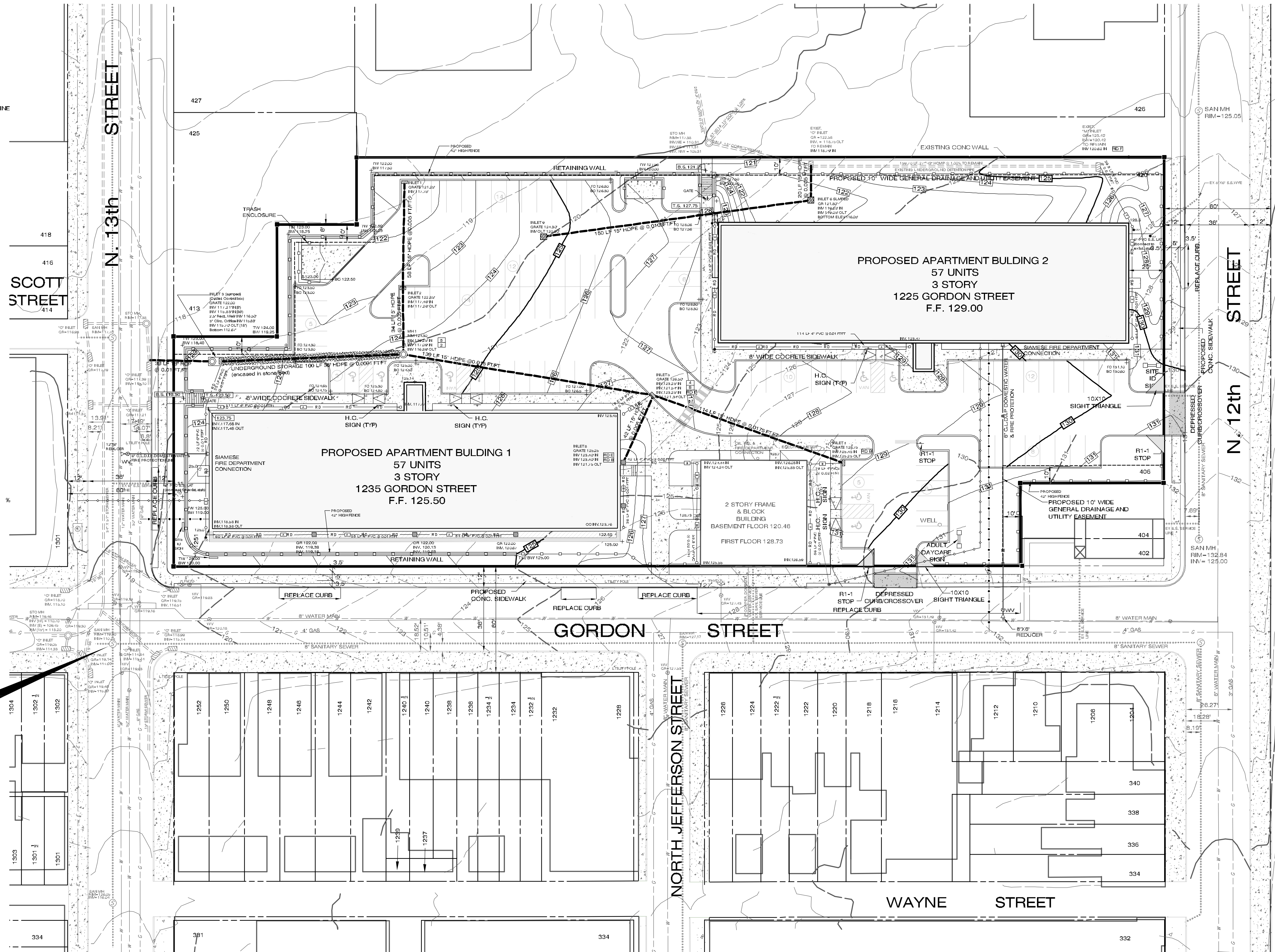
- PROPOSED FEATURES**
- STORM SEWER MANHOLE
 - STORM SEWER INLET TYPE C
 - END WALL
 - FIRE HYDRANT
 - WELL
 - SIGN
 - REDUCER
 - SANITARY SEWER
 - SANITARY SEWER LATERAL
 - STORM SEWER
 - ROOF DRAIN
 - UNDERGROUND WATER LINE
 - UNDERGROUND WATER SERVICE LINE
 - UNDERGROUND ELECTRIC/COMMUNICATIONS LINE
 - UNDERGROUND GAS LINE

NOTES

1. BOUNDARY & TOPOGRAPHIC INFORMATION TAKEN FROM 'BOUNDARY & TOPOGRAPHIC SURVEY PLAN' PREPARED BY RITTER & PLANTE ASSOCIATES AND DATED APRIL 28, 2006.
2. LOCATION OF UNDERGROUND UTILITIES IS APPROXIMATE ONLY, AND IS TAKEN FROM THE PLAN REFERENCED ABOVE AS WELL AS CITY OF ALLENTOWN UTILITY PLANS & PLANS FURNISHED BY UTILITY OWNERS. CONTRACTORS MUST IDENTIFY THE LOCATION OF ALL UTILITIES PRIOR TO COMMENCING EXCAVATION.
3. ELEVATIONS ARE BASED ON CITY OF ALLENTOWN DATUM. BENCHMARK IS SANITARY SEWER MANHOLE AT N. 13TH ST. & GORDON ST. INVERT ELEVATION 110.25.
4. SOILS ARE IDENTIFIED AS M6A, MADE LAND LIMESTONE MATERIALS IN THE USDA SOIL SURVEY FOR LEHIGH COUNTY.
5. THE AREA OF THE SITE IS 117,900 S.F. OR 2.70 ACRES.
6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF ALLENTOWN AND PADOT STANDARDS.
7. ON-SITE IMPROVEMENTS MUST COMPLY WITH CITY OF ALLENTOWN BUILDING CODE.
8. ALL STORM SEWER PIPE SHALL BE CLASS III RCP WITH WATER TIGHT JOINTS.
9. GRAVITY SANITARY SEWER LATERALS SHALL BE EITHER SCHEDULE 40 OR SDR-21 IPS PRESSURE RATED GASKETED P.V.C.
10. ALL ROOF DRAINS SHALL BE CONNECTED TO THE STORMWATER COLLECTION PIPE SYSTEM OR SHALL DISCHARGE DIRECTLY TO THE STORMWATER MANAGEMENT BASIN.
11. ALL DETENTION FACILITIES, ON-SITE B.M.P.'S, AND DRAINAGE SYSTEMS SHALL BE PERIODICALLY INSPECTED, CLEANED AND MAINTAINED BY THE OWNER.
12. A WATER METER AND BACKFLOW PREVENTION DEVICE SHALL BE PROVIDED INSIDE EACH BUILDING.
13. ALL SANITARY AND STORM SEWER WITH A SLOPE LESS THAN 1:0 ARE TO BE CONSTRUCTED USING A LASER BEAM TO ASSURE PROPER LINE AND GRADE, UNLESS OTHERWISE DIRECTED.
14. ALL MANHOLES AND INLET SHALL BE MADE OF PRECAST CONCRETE MEETING CITY STANDARDS UNLESS OTHERWISE NOTED.
15. ALL INLET GRATES SHALL BE MADE OF FABRICATED STEEL.
16. ALL STORM SEWER STRUCTURES THAT EXCEED 4 FEET IN DEPTH SHALL BE CONSTRUCTED WITH STEPS AS PER PENNDOT RC34 AND RC39.
17. ALL CONSTRUCTION IMPROVEMENTS TO BE PERFORMED WITHIN THE PUBLIC RIGHTS-OF-WAY SHALL CONFORM TO THE CITY'S BUREAU OF ENGINEERING STANDARDS.
18. THE MINIMUM DISTANCE BETWEEN THE PLACEMENT OF TREES, LIGHT POLES, ETC. AND UTILITY SERVICE LINES SHALL BE 10'.
19. RUNOFF FROM IMPERVIOUS AREAS SHALL NOT BE DIRECTED INTO THE SANITARY SEWER NOR ONTO ADJACENT PROPERTIES.

ROOF DRAIN PIPES

| PIPE DIAMETER | SLOPE | ft/ft | KEY | Allowable Roof Area (s.f.) |
|---------------|-------------|--------|-----|----------------------------|
| 4 inch | 1/8 in/ft = | 0.0104 | A | 1,100 |
| | 1/4 in/ft = | 0.0208 | B | 1,500 |
| | 3/8 in/ft = | 0.0313 | C | 1,900 |
| | 1/2 in/ft = | 0.0417 | D | 2,200 |
| 6 inch | 1/8 in/ft = | 0.0104 | E | 3,200 |
| | 1/4 in/ft = | 0.0208 | F | 4,800 |
| | 3/8 in/ft = | 0.0313 | G | 3,500 |
| | 1/2 in/ft = | 0.0417 | H | 4,000 |
| 8 inch | 1/8 in/ft = | 0.0104 | I | 7,000 |
| | 1/4 in/ft = | 0.0208 | J | 10,000 |
| | 3/8 in/ft = | 0.0313 | K | 12,200 |
| | 1/2 in/ft = | 0.0417 | L | 14,100 |



NOTE: PENNSYLVANIA ACT 187 REQUIRES THAT CONTRACTORS DETERMINE THE LOCATION OF ALL UTILITY, SEWAGE AND WATER LINES BEFORE COMMENCING CONSTRUCTION. SEE SHEET ONE FOR UTILITY OWNERS.

| REVISIONS | |
|-----------|--|
| 1 | 5-31-2006 DESIGN MODIFICATION |
| 2 | 6-16-2006 CITY PLANNERS REVIEW #1-2-06 |
| 3 | 11-05-2007 CITY PLANNERS REVIEW #1-26-06 |
| 4 | 7-14-2008 LODD REVIEW & SUBMISSION |
| 5 | 10-16-2008 STAKE OUT & WALL PLANS |

Gordon St. Apartments
 BLOCK 16 LOT 4 WARD 8
 1231 W. GORDON ST.
 ALLENTOWN, PENNSYLVANIA

prepared for:
 CONNOLLY & COLASUONNO
 128 East Seventh Street
 Plainfield, NJ 07060

prepared by:
 RITTER & PLANTE ASSOCIATES, LLC
 4220 Main Street
 Philadelphia, PA 19127 215-508-3900

DAVID J. PLANTE, Professional Engineer PA. No. PE-043820-E
 FINAL LAND DEVELOPMENT PLAN
 Date: MAY 15, 2006 Scale: 1"=30'

GRADING & UTILITY PLAN
 Sheet 5 of 10

