

GENERAL CONSTRUCTION NOTES

- 1. The construction shall be under the general inspection of the Village engineer and the owner's engineer.
2. All work shall be in accordance with the applicable sections of the following specifications:
a. Illinois Department of Transportation (I.D.O.T.) "Standard Specifications for Road and Bridge Construction" January 1, latest edition.
b. "Standard Specifications for Water and Sewer Main Construction in Illinois" latest edition.
c. "Illinois Recommended Standards for Sewage Works" as published by the I.E.P.A.
d. "Manual on Uniform Traffic Control Devices" (M.U.T.C.D.) latest edition.
e. The Subdivision and Development Codes and Standards of the Village of Morton Grove
f. "Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois" published by the Association of Illinois Soil and Water Conservation Districts.

Where a contradiction occurs with any part of the standard specifications, the most stringent requirement shall take precedence, as determined by the engineer.

The contract documents (Plans and Specifications/General Notes) shall supersede the standard specifications. If there is a conflict between the plans and specifications, the most stringent requirement shall take precedence, as determined by the engineer.

- The contractor shall have at least one copy of all applicable specifications as well as one copy of the contract documents (Plans and Specifications) available at the job site at all times that work is in progress.
3. Should any discrepancies or conflicts on the plans, quantities or specifications be discovered by the contractor, whether prior to awarding or after the award of the contract, the engineer's attention shall be called to the same before work is begun thereon and so that proper corrections can be made.

- 4. Contract Documents and Drawings:
A. The engineer's drawings (The Plans) shall be included as part of the contract documents.
B. The contractor is required to review the soils report for the site.
C. All bidders shall carefully examine the drawings and specifications prepared for the work. They shall visit the site of the work and acquaint themselves with all local conditions, codes, and requirements affecting the contract. If awarded the contract, they shall not be allowed extra compensation by reason of any unforeseen difficulties or obstacles which the bidder could have discovered or reasonably anticipated prior to the bidding.
D. Should it appear that the work covered by the contract documents is not sufficiently detailed or explained, an RFI form shall be submitted to the engineer for further drawings or explanations as may be necessary to clarify the point in question prior to the contract award. It is the intention of the contract documents to provide a job complete in every respect. The contractor is responsible for this result and to turn over the project in complete operating condition, irrespective of whether the contract documents cover every individual item in minute detail.

- 5. The Morton Grove Department of Public Works and Community Development shall be notified 24 hours in advance to schedule inspections for sidewalk, curb and gutter driveways, aprons, paving, grading, watermain, sewer main and utility services. Call (847) 470-5235
6. Work shall not take place without required traffic control devices and barricades in place per the M.U.T.C.D. Any deficiency of safety or traffic control devices shall be just cause to stop the project until such time as the deficiency is corrected.

- 7. Village streets shall not be closed without the written permission of the Morton Grove Department of Engineering and Community Development and then only after proper notification has been given to the Police and Fire Departments.
8. The contractor shall immediately remove mud, soil or debris deposited on public streets. Failure to keep streets clean shall be just-cause for issuance of a Stop Work Order or citation.

- 9. Signs located in the public right-of-way must not be removed or damaged. If a sign needs to be moved, notify the Public Works Department at (847) 470-5235.
10. Construction materials shall not be stored within the Village Right-Of-Way.
11. The owner/contractor shall be responsible for obtaining all required Federal, State, County, I.E.P.A. permits.

- The contractor shall, at his own expense, obtain all other permits, licenses, etc., as may be required for the execution of this work, give all necessary notices, pay all fees required, post all bonds, and comply with all laws, ordinances, rules and regulations relating to the work and to the preservation of public health and safety.
12. The contractor shall meet all of the requirements of any permits as might be issued for this work by other agencies, and shall pay for at their sole expense any surety or bonds as may be required by the permitting agency.

- 13. The contractor is responsible for having a set of approved engineering plans with the latest revision date on the job site at all times during the construction period.
14. The contractor shall indemnify and save harmless the owner, Bono Consulting Inc., and their officers and employees; the Village and their officers, employees, agents, and engineers, and from and against all losses, claims, demands, payments, suits, actions, recoveries, and judgment of every nature and description brought or recovered against them, by reason of any act or omission of said contractor, their agents, subcontractors or employees, in the execution of the work or in the guarding of it.

- 15. The Location of existing underground utilities, such as water mains, sewers, gas lines, etc., as shown on the plans, has been determined from the best available information and is given for the convenience of the Contractor. However, the Owner and Engineer do not assume responsibility in the event that during construction, utilities other than those shown may be encountered and that the actual location of these utilities as shown may be different from the location as shown on the plans. The contractor is to verify the location of all utilities prior to the start of work and is responsible for damage to same. The contractor shall call J.U.L.I.E. 1-800-892-0123 and the Village public works department for utility locates before excavating.

- 16. Existing utilities are shown on the plans according to information obtained from utility companies and surveys. The owner and engineer do not guarantee the accuracy or completeness of this information. The contractor shall make their own investigation to determine the existence, nature and location of all utility lines and appurtenances within the limits of the improvement. The contractor shall locate all utilities far enough in advance to avoid all conflicts in grade separation between existing utilities and proposed improvements. If the contractor encounters a conflict between the proposed improvement and existing utility that was not located in advance by the contractor, then the contractor shall at no cost to owner, relocate the proposed improvements and/or utility to avoid the conflict.

- 17. The contractor will be required to cooperate with all utility companies involved in connection with the removal, temporary relocation, reconstruction or abandonment by these companies of any and all services or facilities owned or operated by them within the limit of this improvement.

- 18. Before doing any work which will damage, disturb or leave unsupported or unprotected any utility lines or appurtenances encountered, the contractor shall notify the respective owner thereof, who will make all arrangements for relocating, adjusting, or otherwise maintaining or abandoning service on lines that fall within the limits of the proposed construction without cost to the contractor, including the removal of all cables, manhole covers and other appurtenances which the owner desires to salvage. After such arrangements have been made, the contractor will proceed with the work as directed by the engineer. All utility lines and appurtenances which are abandoned shall be removed and legally disposed of by the contractor.

- 19. No extra compensation will be allowed by the contractor for any expense incurred by complying with these requirements or because of delays, inconvenience or interruptions in their work resulting from the failure of any utility company to remove, relocate, reconstruct or abandon their services. The responsibility for prompt and timely removal, relocation, reconstruction or abandonment of their facilities by all utility companies involved, and the coordination of their own work with that of these companies to the end that work on this improvement is not delayed because of the necessary changes in the existing utilities, public or private, shall rest upon the contractor.

- 20. The flow from any field tiles draining off-site properties shall be maintained. The contractor shall notify the engineer if any such field tiles are encountered and shall show them on a set of as-built plans.
21. All existing utilities or improvements, including walks, curbs, pavements and parkways damaged or removed during construction shall be promptly restored to their respective original condition.
22. All existing pavement or concrete to be removed shall be saw cut along the limits of the proposed removal. Payment for sawing shall be included in the cost of the removal of each item.

- 23. The contractor is to verify all critical elevations prior to commencing work and if there are any discrepancies, is to notify the engineer immediately. The contractor shall call to the attention of the engineer any errors or discrepancies which may be suspected in the lines and grades which are established by the surveyor, and shall not proceed with the work until any lines and grades which are to be believed to be in error have been verified or corrected by the engineer.
24. No holes are to be left open in the pavement or the parkway over a holiday, weekend, or after 3 p.m. on the day preceding a holiday or weekend.
25. Any bracing, sheathing or special construction methods deemed necessary by the contractor in order to install the proposed improvements shall be considered incidental to the cost of the project. Any additional soils data needed to confirm the contractor's opinions of the subsol conditions shall be done at the contractor's expense. The contractor shall obtain the owner's written authorization to access the site to conduct a supplemental soils investigation.

- 26. Whenever the performance of work is indicated on the plans, and no item is included in the contract for payment, the work shall be considered incidental to the contract and no additional compensation will be allowed.
27. All items shown to be removed, shall be legally disposed of off-site.
28. All work performed under this contract shall be guaranteed against all defects in materials and workmanship of whatever nature by the contractor and his surety for a minimum period of 12 months from the date of final acceptance of the work by the Village, other applicable governmental agencies, and the owner.
29. No work shall be performed on adjacent private property without the written permission of the property owner.

- 26. During construction the contractor and their subcontractors shall remove from the premises, rubbish, waste material and accumulations, and shall keep the premises clean. The contractor shall clean the premises to the satisfaction of the owner, engineer, and Village.
27. The contractor shall have appropriate equipment, including street sweepers and end loaders available on-site at all times when equipment or vehicles are using existing public or private pavement. The contractor shall immediately remove any dirt, mud, clay, sediment, concrete, gravel, sand, stones, planter material, debris, refuse, garbage, etc. deposited on any street, sidewalk or alley by any equipment, vehicles or people associated with this project. The contractor is responsible for complying with all Village ordinances including any and all assessments of cost that may result. This work shall not be paid for separately, but shall be included in the cost of the work.

- 28. All trenching, shoring, and construction work performed shall be in accordance with O.S.H.A. Standards. The contractor shall at all times maintain proper dust control at the site and shall have a water truck readily available during all working hours.
29. The contractor shall water the entire site whenever the site conditions become unhealthy due to blowing soil or dust. The site shall be watered as many times per day as necessary to maintain a healthy work site as determined by the owner or engineer. Water for non-emergency use shall not be obtained from any fire hydrant, unless the fire hydrant is metered in accordance with Village requirements. The cost to furnish dust control shall be incidental to the cost of construction.

- 30. The contractor must follow the requirements of the Village Specification for all pavement openings and repairs.
31. Tree removal permit is required for removal of all trees 10" diameter or greater.
32. An inspection of the top of foundation will be required prior to pouring.
33. A final inspection of grading will be required before placement of any sod.

- 34. All street openings shall be in accordance with IDOT standards for work within an IDOT R.O.W.
35. All retaining walls greater than 36" high need to be approved by a licensed structural engineer. Retaining wall shop drawings to be submitted by contractor for approval.
36. Construction staking shall be provided by the contractor and shall be included in the contract price. A licensed surveyor must stake all grading, utility and paving work.
37. Upon completion of the project, the contractor or engineer shall submit a sets of as-built engineering plan and a grading certificate. These documents shall be submitted within thirty (30) days of final approval to the Village. The price per this work shall be included in contractors fee.

- 38. Excavation shall consist of the excavation, removal, and satisfactorily disposal or placement and compaction of all materials taken from within the site for the construction of embankments, subgrade, subbase, shoulders, intersections, ditches, waterways, entrances, approaches and incidental work, and the removal and satisfactory disposal of unstable and unsuitable materials and their replacement with satisfactory materials where required.
39. After stripping and excavating to the proposed subgrade level, as required, the building and parking areas should be proof-rolled with a loaded, tandem-axle dump truck or similar rubber tired vehicle, loaded with at least 9 tons per axle. Proof-rolling aids in providing a firm base for compaction of fills, and help to delineate soft, loose, or disturbed areas that may exist below subgrade level. Proof-rolling is especially important to help evaluate the surficial stability of existing fill soils that may be left in place below floor slabs and pavements. Soils which are observed to rut or deflect excessively (more than 1 inch) under the moving load should either be scarified and re-compacted with a smooth drum vibratory roller for granular soils, a sheeps foot roller for cohesive soils, or undercut and replaced with properly compacted and documented structural fill. The proof-rolling and undercutting activities should be observed and documented by a representative of the geotechnical engineer and should be performed during a period of dry weather. In addition to proof-rolling, the subgrade soils should be scarified and compacted to at least 90 percent of the Modified Proctor maximum dry density ASTM D 698 for a depth of at least 8 inches below the surface.

- 40. Where encountered, loose sands and asphalt grindings should be re-compacted with a vibratory roller. Clay subgrade soils can be easily disturbed by construction activities and are sensitive to moisture. Therefore, extra care should be used to avoid disturbing these soils during construction activities. If the soils become unstable during construction, or if near surface soft subgrade soils are encountered, it is recommended that coarse aggregate be placed on the subgrade until a stable base for compaction of fill is achieved. Typically, 12 to 24 inches of course aggregate are required, depending in the consistency of the subgrade, the course aggregate should consists of clean, crushed stone gravel between 1/4 and 3 inches in size. The course aggregate should be spread in a max. of 12-inch layers and consolidated with compaction equipment until it is "locked" in place.
41. Topsoil excavation shall consist of the removal and stockpiling, or placing on fill slopes or placing in mounds, of the uppermost layers of organic soil. Topsoil shall be stockpiled on the areas as shown on the plans or as directed by the engineer.

- 42. Topsoil spread shall consist of placing a minimum of a four (4) inch layer of topsoil over the unpaved areas within the construction limits.
43. 4" topsoil & sod shall be placed on all disturbed areas within the right of way.
44. Refer to the landscape plans for additional information on ground cover & planting requirements.
45. Embankment shall be placed in accordance with Section 205 of the "Standard Specifications for Road and Bridge Construction." All embankments located within structural fill areas shall be constructed to a minimum 95% of the modified proctor density (ASTM D1557). Embankments located in non-structural fill areas shall be constructed to a minimum of 90% of the modified proctor density (ASTM D1557).

- 46. Completed grading (finished fine grade) for all proposed improvements shall be within a tolerance of plus or minus one-tenth (0.1) feet of design subgrade elevations.
47. The subgrade for the proposed streets and pavement areas shall be proof-rolled by the contractor in the presence of the Village engineer and soils engineer. Any unstable areas encountered shall be removed and replaced as directed by the Village engineer and soils engineer. Any unstable areas shall be documented by the soils engineer.

- 48. It shall be the responsibility of the contractor to remove from the site any and all materials and debris which results from their construction operations at no additional expense to the owner.
49. When in the opinion of the soils engineer, unsuitable soil conditions are encountered within utility trenches which require the removal of unsuitable materials below the depth of the bedding specified, the contractor shall obtain approval by the owner and the owner's engineer prior to removing the unsuitable soils and replace the material with granular compacted bedding material as directed by the soils engineer and the Village. The depth of the removal and replacement shall be documented by the owner's engineer and witnessed by the contractor.

- 50. This work, when approved by the owner and owner's engineer, will be measured and paid for at the contract unit price per cubic yard in place for unsuitable soil which price shall include the removal and off-site disposal of unsuitable soil, the additional bedding material, and all labor, materials and equipment required to perform the work as specified.
51. The contractor shall be responsible for hiring and scheduling a qualified testing firm for all soil testing. This shall be included in the cost of work.

- 52. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.
53. ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.
54. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
55. INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED AT A MINIMUM:
A. PRIOR TO THE START OF EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.
B. ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
56. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION.
57. STABILIZED CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES; THE CONPERMITTEE SHALL PLAN FOR APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES.
58. STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE, SEDIMENT OR SOILS SERVING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
59. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.
60. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR SEDIMENT CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.
61. TEMPORARILY CLOSED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.
62. ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).
63. VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
64. SOIL STOCKPILES SHALL AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.
65. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL PLANTS.
66. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.
67. THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER.
68. IF PREVENTING SERVICES ARE USED, ADDITIONAL PROPERTIES AND DISPOSAL LOCATIONS SHALL BE IDENTIFIED FROM EROSION AND SEDIMENTATION OPERATING LOGGING RECORDS AND REPORTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF OPERATING ACTIVITIES.
69. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMANS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SAND/FILTER BAG OR EXISTING VEGETATED SLOPE AREA. SEDIMENT LAIDERS WATERS SHALL NOT BE DISCHARGED TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.
70. ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.
71. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED OR A TEMPORARILY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR SEDIMENT CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.
72. UNTIL PERMANENT STABILIZATION IS ACHIEVED.
73. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.
74. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED AS DIRECTED BY THE ENGINEER, THE SITE INSPECTOR, OR MRWD.

- 55. EPA NOTES:
Sewers crossing water mains shall be laid to meet the following specifications:
1. Horizontal Separation:
A. Whenever possible, a water main must be laid at least ten feet horizontally from any existing or proposed drain or sewer line.
B. Should local conditions exist which would prevent a lateral separation of ten feet, a water main may be laid closer than ten feet to a storm or sanitary sewer provided that the water main invert is at least eighteen inches above the crown of the sewer, and is either in a separate trench or in the same trench on an undisturbed earth shell located to one side of the sewer.
C. If it is impossible to obtain proper horizontal and vertical separation as described in 1 and 2 above, both the water main and sewer must be constructed of pipe material which would conform to water main standards and be pressure tested to assure water tightness before backfilling.
2. Vertical Separation:
• Whenever water mains cross house sewers, storm drains or sanitary sewers, the water main shall be laid at such an elevation that the invert of the water main is eighteen inches above the crown of the drain or sewer. This vertical separation must be maintained for that portion of the water main located within ten feet horizontally of any sewer or drain crossed. This must be measured as the normal distance from the water main to the drain or sewer.
• Where conditions exist that the minimum vertical separation set forth in 1 above cannot be maintained, or it is necessary for the water main to pass under a sewer or drain, one of the following two measures must be taken:
•A. The water main shall be installed within a PVC carrier pipe and the carrier pipe shall extend on each side of the crossing until the normal distance from the water main to the sewer or drain line is at least ten (10) feet.
•B. The involved sewer or drain shall be constructed of pipe material which would conform to water main standards until the normal distance from the water main to the sewer is at least ten (10) feet.
3. In making such crossings, center a length of water main pipe over the sewer to be crossed so that the joints will be equidistant from the sewer and as remote there from as possible. Where a water main must cross under a sewer, a vertical separation of eighteen inches between the invert of the sewer and the crown of the water main shall be maintained, along with means to support the larger sized sewer lines to prevent their settling and breaking the water main. The horizontal and vertical separation between water service lines and all sanitary sewers, storm sewers, or any drain should be the same as for water mains, as detailed above, except that when minimum horizontal and vertical separation cannot be maintained, water pipe as described under Vertical Separation above, may be used for sewer service lines.

- 56. EARTHWORK AND GRADING
1. All earthwork shall be done in accordance with the state of Illinois, "Standard Specifications for Road and Bridge Construction," latest edition and "Supplemental Specifications and Recurring Special Provisions," latest edition. Included in this work, but not necessarily limited to the following are: clearing, stripping and stockpiling of topsoil, mass grading and fine grading of the site and roadways, excavation of unsuitable materials and excavation of detention ponds, landscape mound construction, and miscellaneous topsoil respread and seeding.
2. Any earthwork summaries provided by the engineer are intended to be used as a guide for the contractor in determining the scope of the completed project. It is the responsibility of the contractor to determine all material quantities and appraise themselves of all site conditions. The contract price submitted by the contractor shall be considered as lump sum for the complete project. No claims for extra work will be recognized unless ordered in writing by the owner.
3. The initial establishment of erosion control procedures and the placement of erosion control fence, etc. shall be installed by the contractor prior to the start of mass grading.
4. All grading operations are to be supervised and inspected by the owner's engineer or their representative. All testing, inspection, and supervision of soil quality, unsuitable soil removal and its replacement, and other soils related operations shall be entirely the responsibility of the soils engineer. No undercut shall be performed or claims for extra work without authorization by the owner and documentation by the soils engineer.
5. Clearing shall consist of the removal and disposal of all obstructions such as trees, hedges, fences, walls, accumulations of rubbish of whatever nature, and all logs, shrubs, brush, grass, weeds, and other vegetation and stumps. These items shall be performed whenever they occur within the street right of ways, and within the limits of construction. Trees to be saved shall be identified by the Engineer on the construction plans. All trees, except those designated to be saved, and all stumps shall be cut and legally disposed of. Trees, stumps, and hedges within the limits of construction shall be removed completely. Trees designated to be saved as indicated on the plans, or as directed by the engineer, shall be protected in accordance with the procedures outlined in Article 201.05 of the "Standard Specifications for Road and Bridge Construction."
6. Strip topsoil down to firm subbase. stockpile quantity necessary for landscaping, and remove other materials from the site.

- 57. Excavation shall consist of the excavation, removal, and satisfactorily disposal or placement and compaction of all materials taken from within the site for the construction of embankments, subgrade, subbase, shoulders, intersections, ditches, waterways, entrances, approaches and incidental work, and the removal and satisfactory disposal of unstable and unsuitable materials and their replacement with satisfactory materials where required.
58. After stripping and excavating to the proposed subgrade level, as required, the building and parking areas should be proof-rolled with a loaded, tandem-axle dump truck or similar rubber tired vehicle, loaded with at least 9 tons per axle. Proof-rolling aids in providing a firm base for compaction of fills, and help to delineate soft, loose, or disturbed areas that may exist below subgrade level. Proof-rolling is especially important to help evaluate the surficial stability of existing fill soils that may be left in place below floor slabs and pavements. Soils which are observed to rut or deflect excessively (more than 1 inch) under the moving load should either be scarified and re-compacted with a smooth drum vibratory roller for granular soils, a sheeps foot roller for cohesive soils, or undercut and replaced with properly compacted and documented structural fill. The proof-rolling and undercutting activities should be observed and documented by a representative of the geotechnical engineer and should be performed during a period of dry weather. In addition to proof-rolling, the subgrade soils should be scarified and compacted to at least 90 percent of the Modified Proctor maximum dry density ASTM D 698 for a depth of at least 8 inches below the surface.

- 59. Where encountered, loose sands and asphalt grindings should be re-compacted with a vibratory roller. Clay subgrade soils can be easily disturbed by construction activities and are sensitive to moisture. Therefore, extra care should be used to avoid disturbing these soils during construction activities. If the soils become unstable during construction, or if near surface soft subgrade soils are encountered, it is recommended that coarse aggregate be placed on the subgrade until a stable base for compaction of fill is achieved. Typically, 12 to 24 inches of course aggregate are required, depending in the consistency of the subgrade, the course aggregate should consists of clean, crushed stone gravel between 1/4 and 3 inches in size. The course aggregate should be spread in a max. of 12-inch layers and consolidated with compaction equipment until it is "locked" in place.
60. Topsoil excavation shall consist of the removal and stockpiling, or placing on fill slopes or placing in mounds, of the uppermost layers of organic soil. Topsoil shall be stockpiled on the areas as shown on the plans or as directed by the engineer.

- 61. Topsoil spread shall consist of placing a minimum of a four (4) inch layer of topsoil over the unpaved areas within the construction limits.
62. 4" topsoil & sod shall be placed on all disturbed areas within the right of way.
63. Refer to the landscape plans for additional information on ground cover & planting requirements.
64. Embankment shall be placed in accordance with Section 205 of the "Standard Specifications for Road and Bridge Construction." All embankments located within structural fill areas shall be constructed to a minimum 95% of the modified proctor density (ASTM D1557). Embankments located in non-structural fill areas shall be constructed to a minimum of 90% of the modified proctor density (ASTM D1557).

- 65. Completed grading (finished fine grade) for all proposed improvements shall be within a tolerance of plus or minus one-tenth (0.1) feet of design subgrade elevations.
66. The subgrade for the proposed streets and pavement areas shall be proof-rolled by the contractor in the presence of the Village engineer and soils engineer. Any unstable areas encountered shall be removed and replaced as directed by the Village engineer and soils engineer. Any unstable areas shall be documented by the soils engineer.

- 67. It shall be the responsibility of the contractor to remove from the site any and all materials and debris which results from their construction operations at no additional expense to the owner.
68. When in the opinion of the soils engineer, unsuitable soil conditions are encountered within utility trenches which require the removal of unsuitable materials below the depth of the bedding specified, the contractor shall obtain approval by the owner and the owner's engineer prior to removing the unsuitable soils and replace the material with granular compacted bedding material as directed by the soils engineer and the Village. The depth of the removal and replacement shall be documented by the owner's engineer and witnessed by the contractor.

- 69. This work, when approved by the owner and owner's engineer, will be measured and paid for at the contract unit price per cubic yard in place for unsuitable soil which price shall include the removal and off-site disposal of unsuitable soil, the additional bedding material, and all labor, materials and equipment required to perform the work as specified.
70. The contractor shall be responsible for hiring and scheduling a qualified testing firm for all soil testing. This shall be included in the cost of work.

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75. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION.
76. STABILIZED CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES; THE CONPERMITTEE SHALL PLAN FOR APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES.
77. STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE, SEDIMENT OR SOILS SERVING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
78. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.
79. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR SEDIMENT CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.
80. TEMPORARILY CLOSED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.
81. ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).
82. VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
83. SOIL STOCKPILES SHALL AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.
84. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL PLANTS.
85. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.
86. THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER.
87. IF PREVENTING SERVICES ARE USED, ADDITIONAL PROPERTIES AND DISPOSAL LOCATIONS SHALL BE IDENTIFIED FROM EROSION AND SEDIMENTATION OPERATING LOGGING RECORDS AND REPORTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF OPERATING ACTIVITIES.
88. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMANS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SAND/FILTER BAG OR EXISTING VEGETATED SLOPE AREA. SEDIMENT LAIDERS WATERS SHALL NOT BE DISCHARGED TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.
89. ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.
90. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED OR A TEMPORARILY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR SEDIMENT CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.
91. UNTIL PERMANENT STABILIZATION IS ACHIEVED.
92. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.
93. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED AS DIRECTED BY THE ENGINEER, THE SITE INSPECTOR, OR MRWD.

MRWD GENERAL NOTES

- A. REFERENCED SPECIFICATIONS
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS INDICATED HEREIN OR ON THE PLANS:
* STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION) BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (DOT) (SD) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWERS AND WATER MAINS.
* STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.
* STANDARD SPECIFICATIONS FOR SANITARY SEWERS AND WATER MAIN CONSTRUCTION, LATEST EDITION.
* THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT CRITERIA AND TECHNICAL GUIDANCE MANUAL.
* IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.
B. NOTIFICATIONS
1. THE MRWD LOCAL SEWER SYSTEM SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 630-898-6655).
2. THE RELEASE OF NOISE, DUST, ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OF EACH WORK PHASE.
3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXISTING LOCATIONS OF UTILITIES AND WHETHER PROTECTIVE WORKING CONSTRUCTION, IF EXISTING, UTILITIES ARE ENCOUNTERED THAT COULD BE IN CONFLICT WITH NEW CONSTRUCTION. IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

- C. GENERAL NOTES
1. ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD83). CONVERSION FACTOR IS _____ FT.
2. MRWD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE AND REJECT THE CONSTRUCTION. APPROVED BY MRWD, THE MUNICIPALITY, THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE THE AUTHORITY TO PROCEED ON THE PROJECT.
3. THE CONTRACTORS SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, AND THEIR AGENTS, ETC. FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MRWD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MRWD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST FOLLOW. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED THROUGHOUT THE IMPROVEMENTS INDICATED ON THE PLANS.
5. THE LOCATION OF EXISTING UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND DEPTHS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
6. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
7. MATERIAL AND CONSTRUCTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MRWD, AND OWNERS.
8. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
9. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
10. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS PRACTICABLE. PERMITTED BY THE ENGINEER, FINAL PROVISIONS TO THE CONTRACT SHALL BE MADE. ALL CHANGES AND REVISIONS TO THE CONTRACT SHALL BE MADE BY THE CONTRACTOR. ALL VALVES, BOWENS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, BOWENS, TEES OR BRISKS SHALL BE TIED TO A FIRE HYDRANT.

- D. SANITARY SEWERS
1. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
2. A WATERTIGHT FLUG SHALL BE INSTALLED BY THE DOWNSTREAM SEWER AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE FLUG SHALL REMAIN IN PLACE UNTIL PERMANENTLY APPROVED BY THE MUNICIPALITY AND/OR MRWD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.
3. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLOWING OR LINES FOR THE COLLECTION TEST SHALL BE PROHIBITED WITHOUT MRWD APPROVAL FROM THE MUNICIPALITY OR MRWD.
4. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).
5. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
6. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.

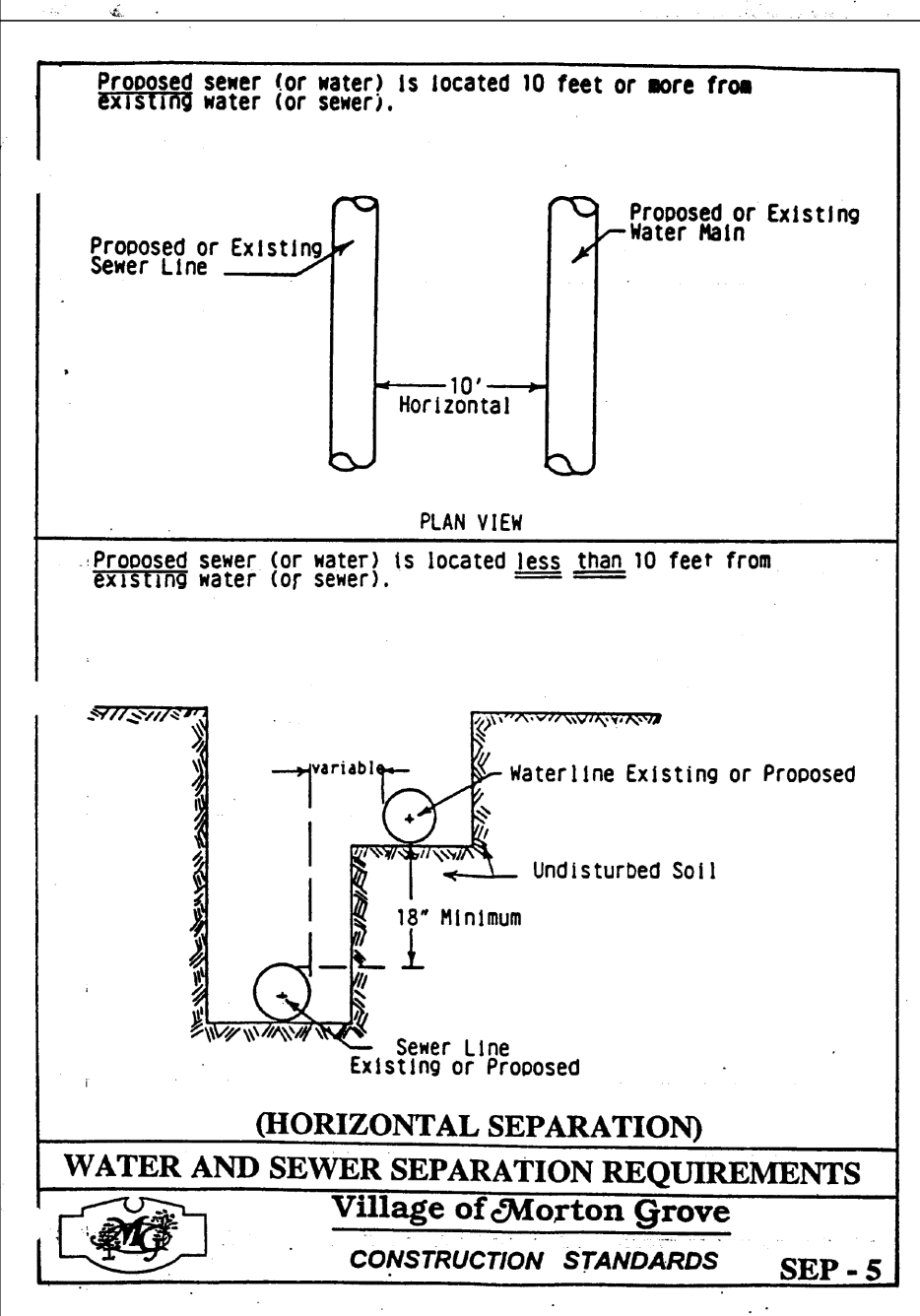
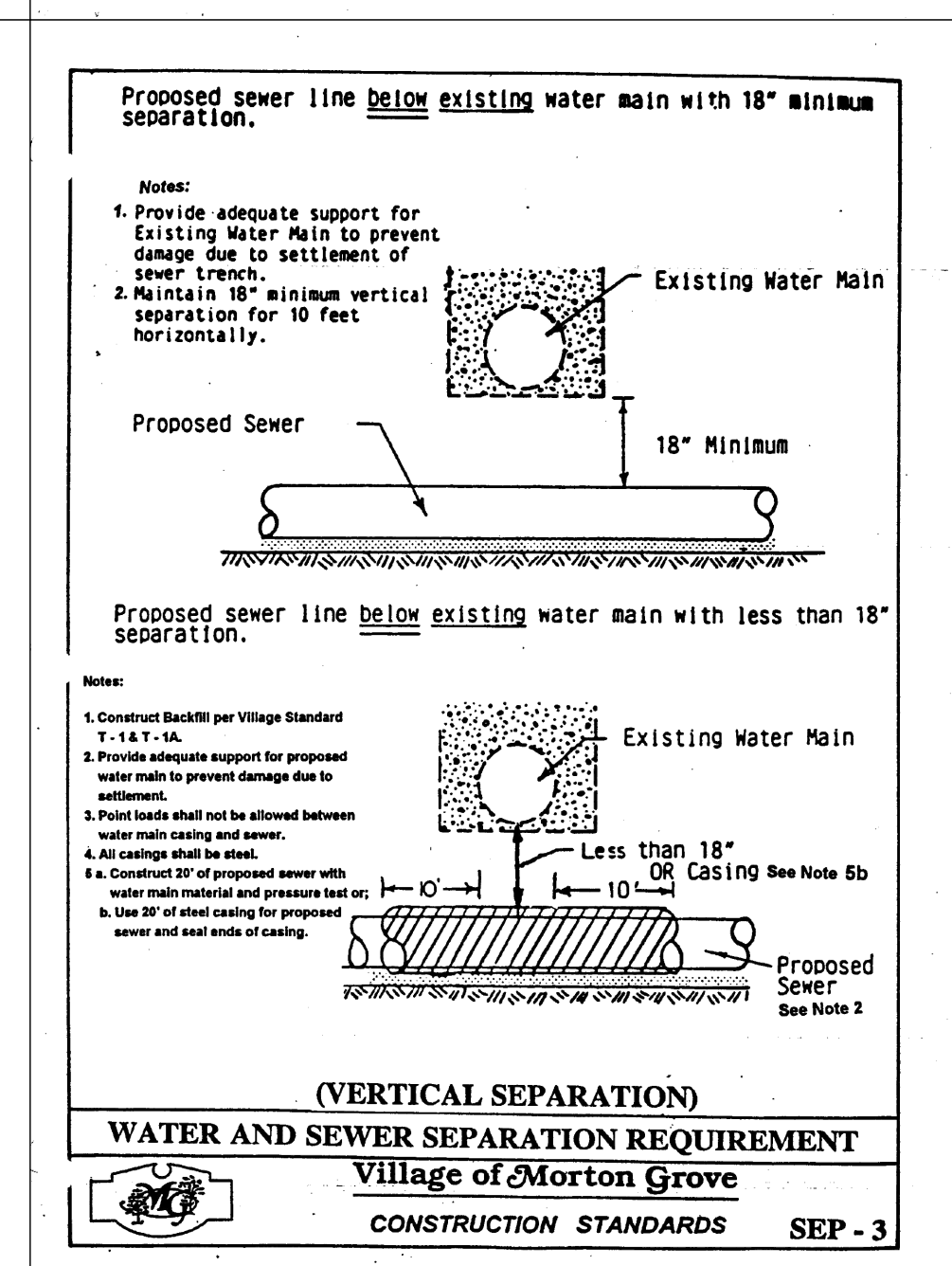
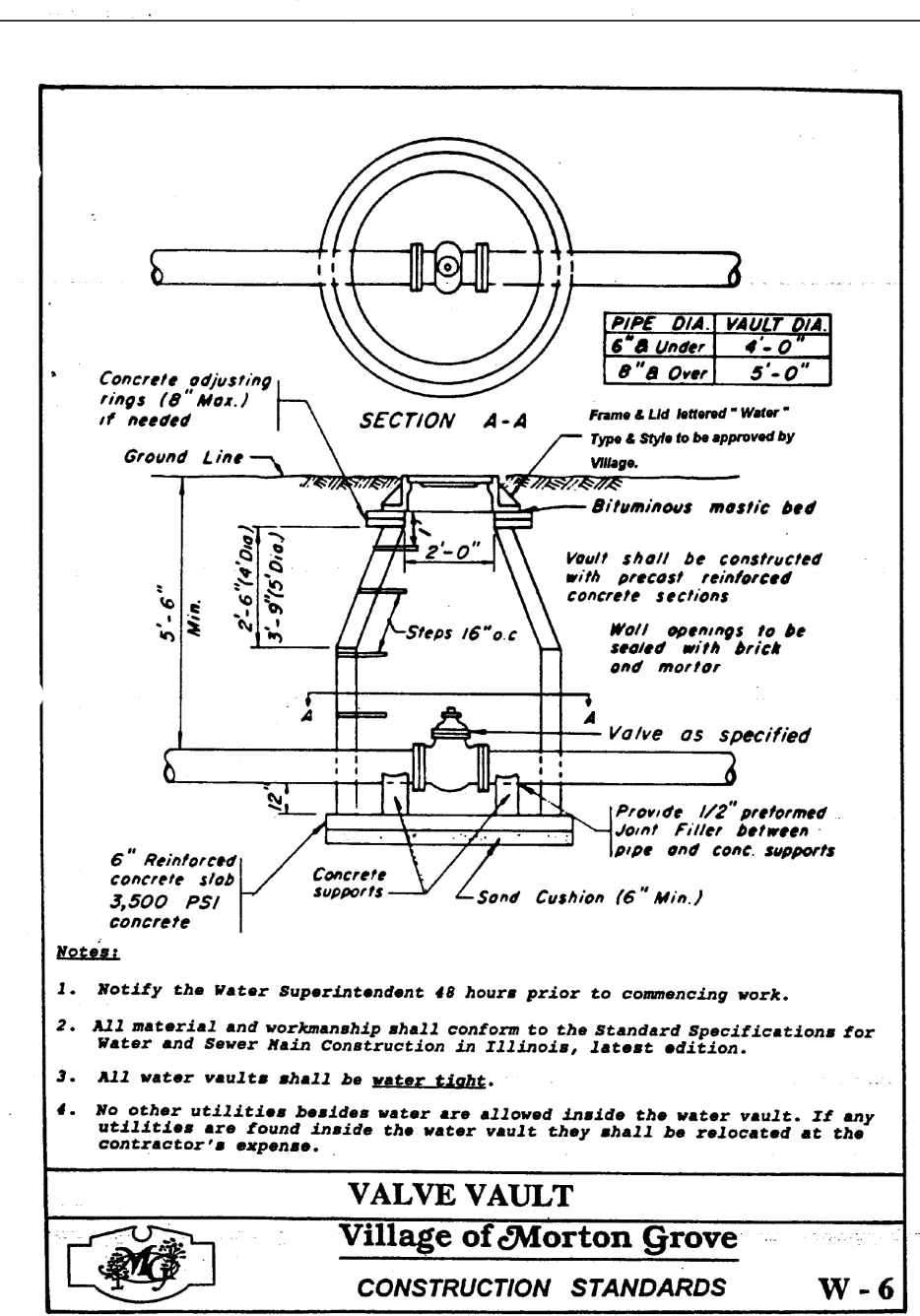
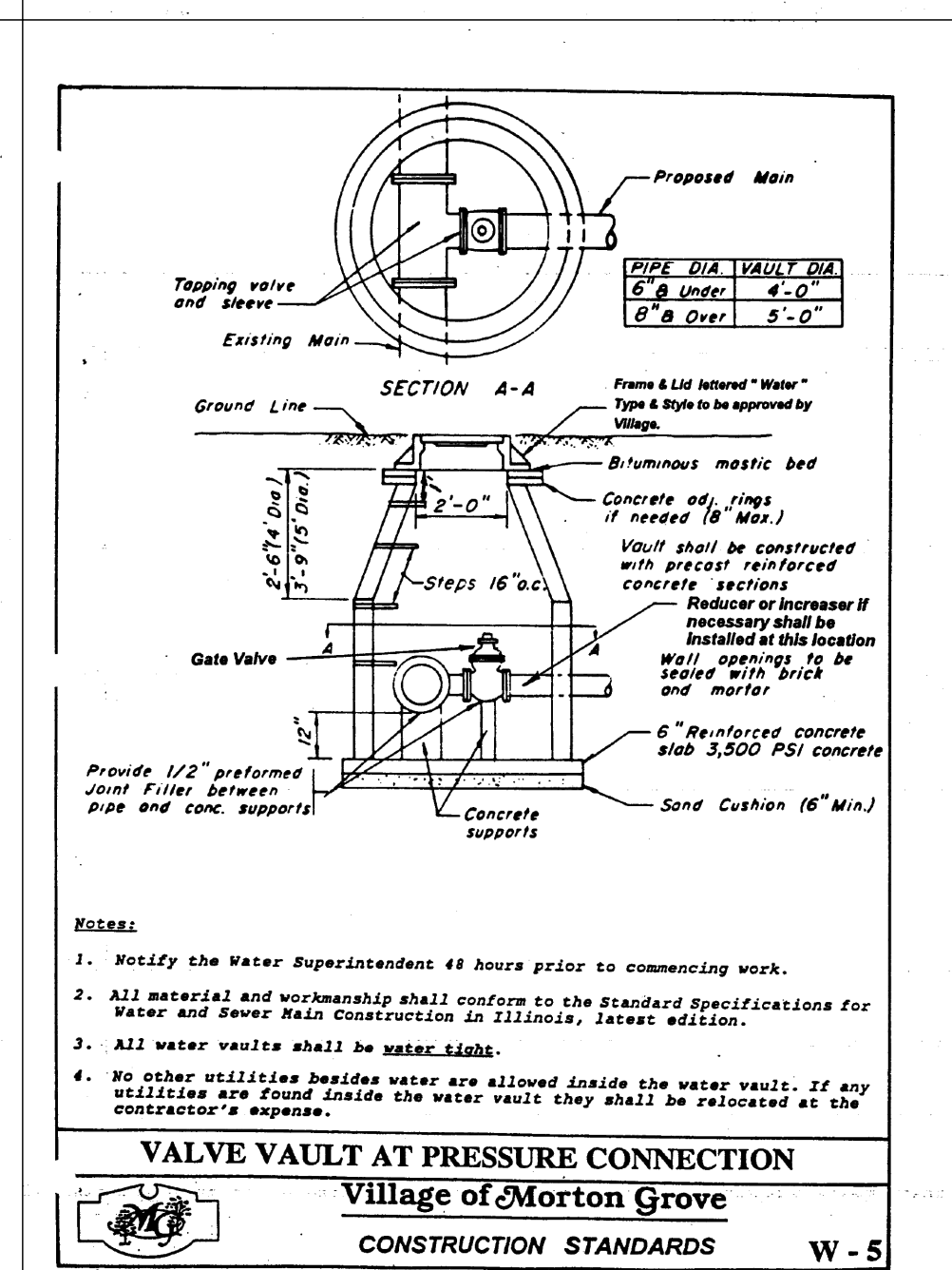
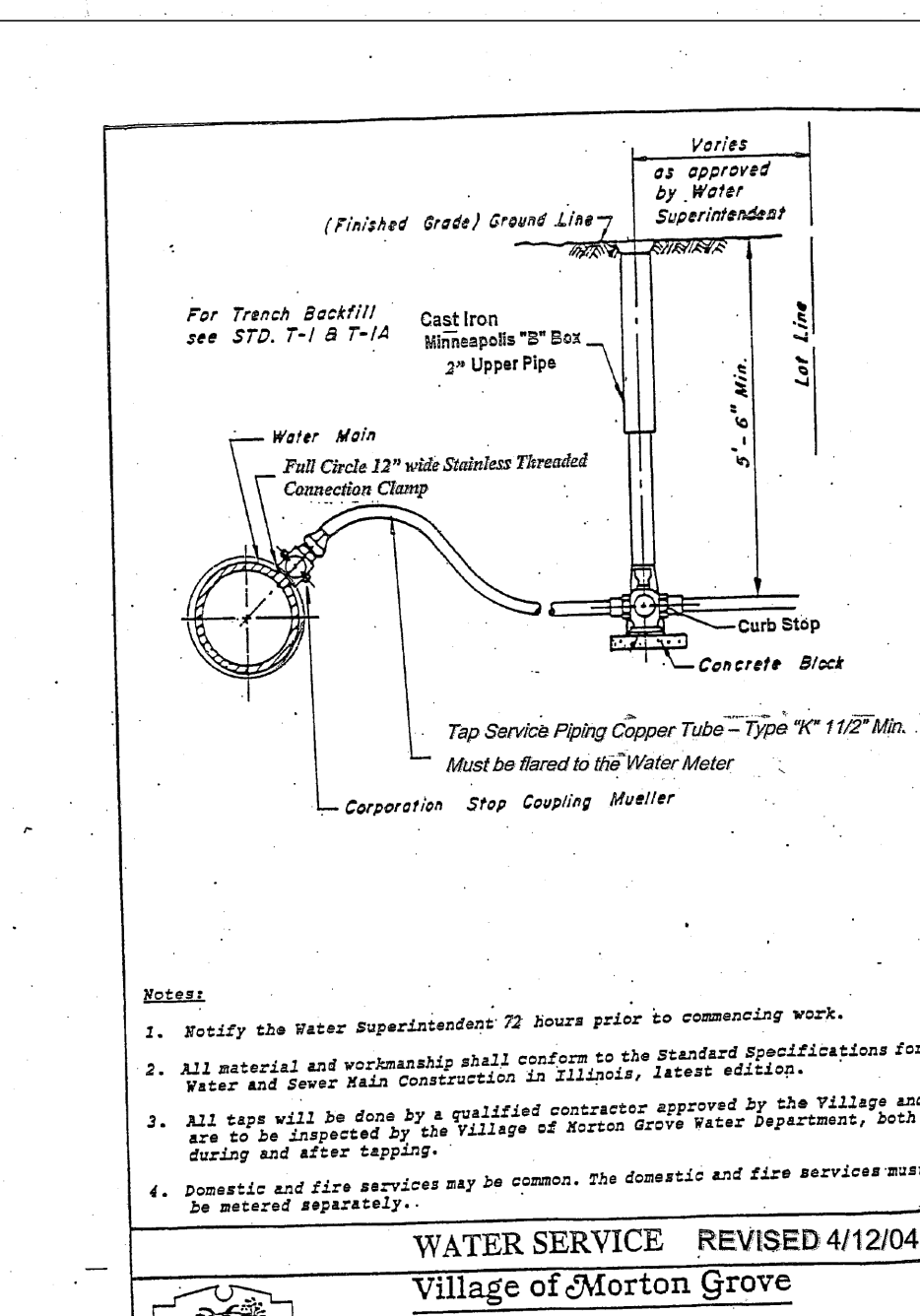
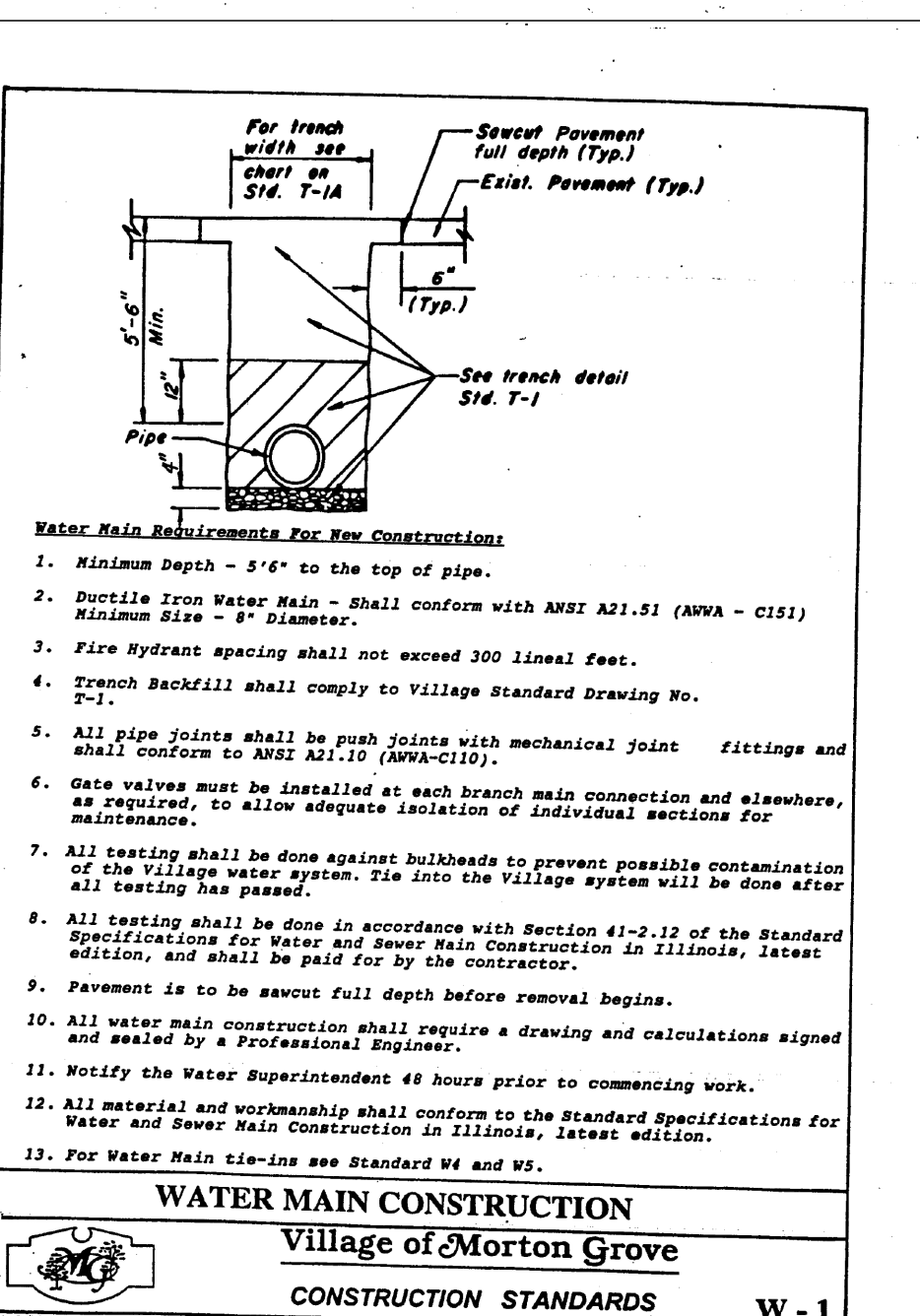
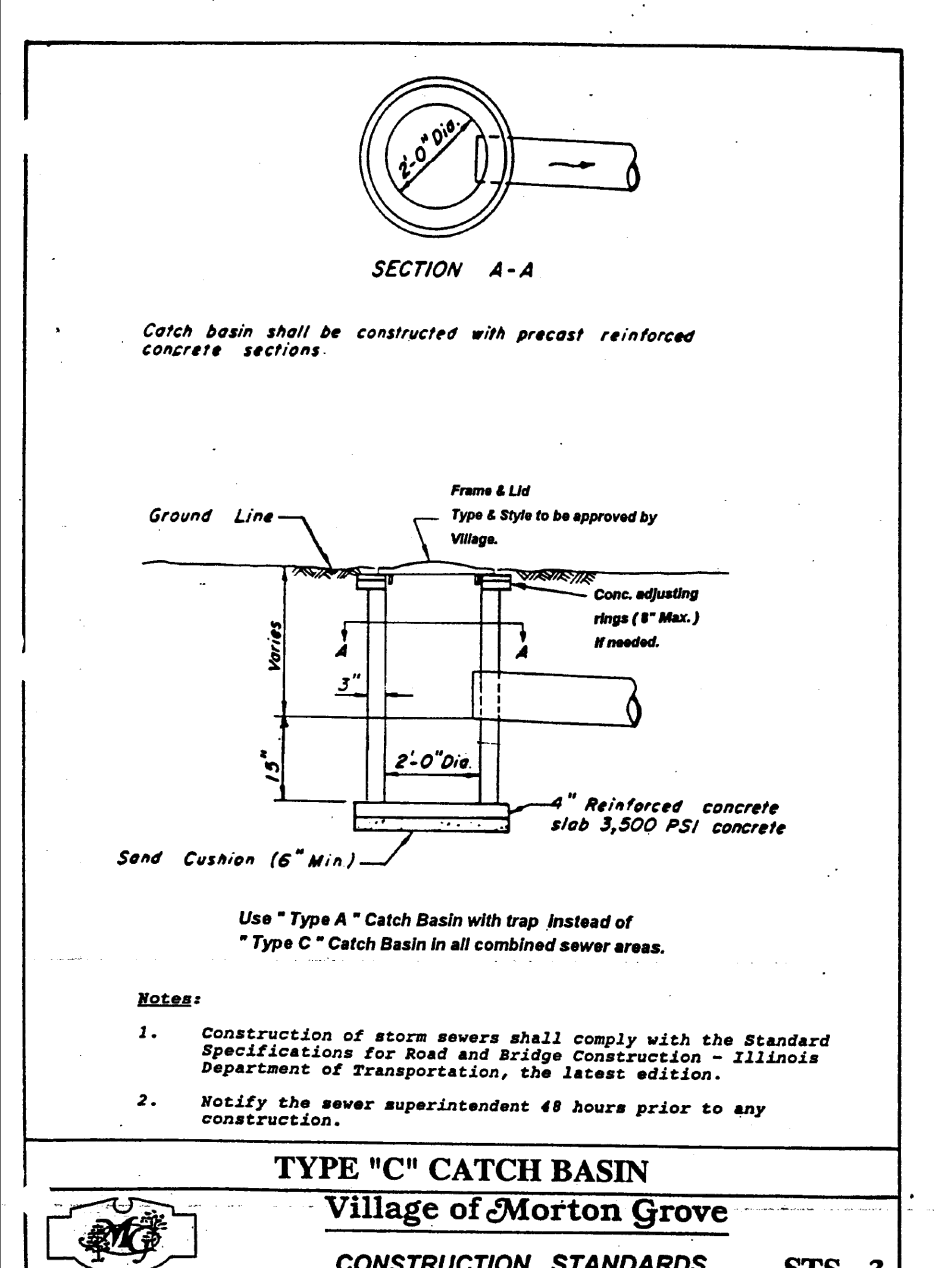
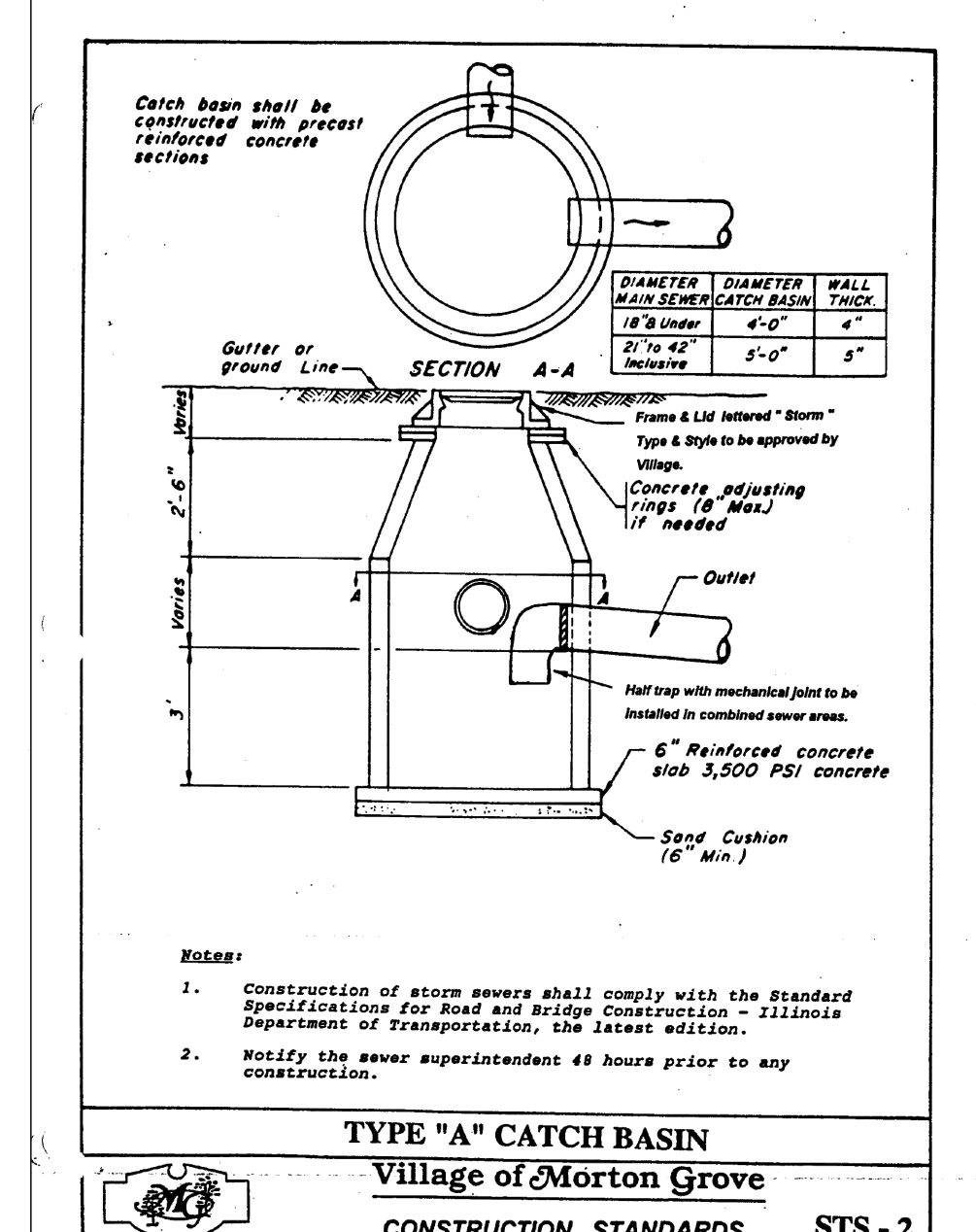
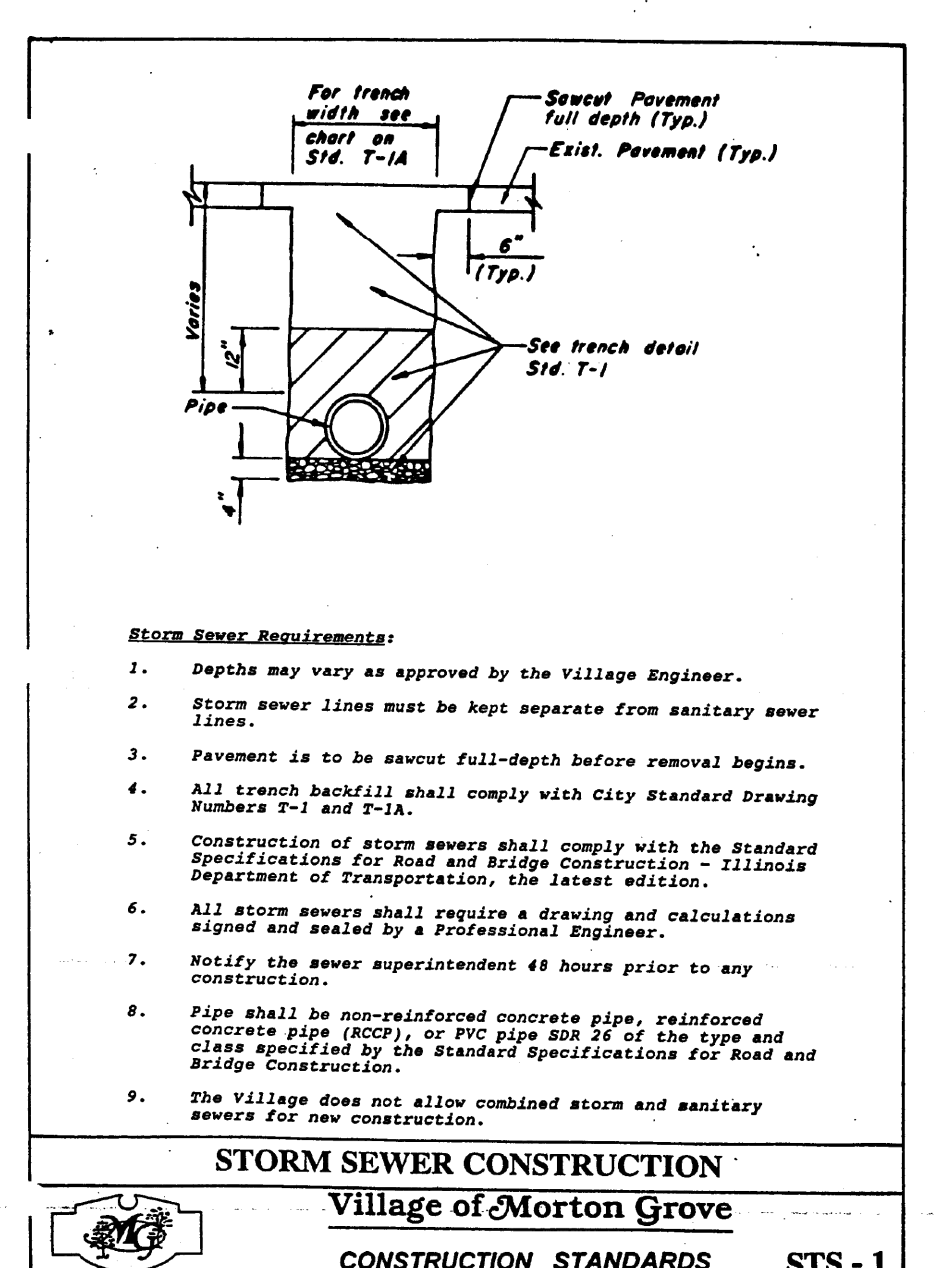
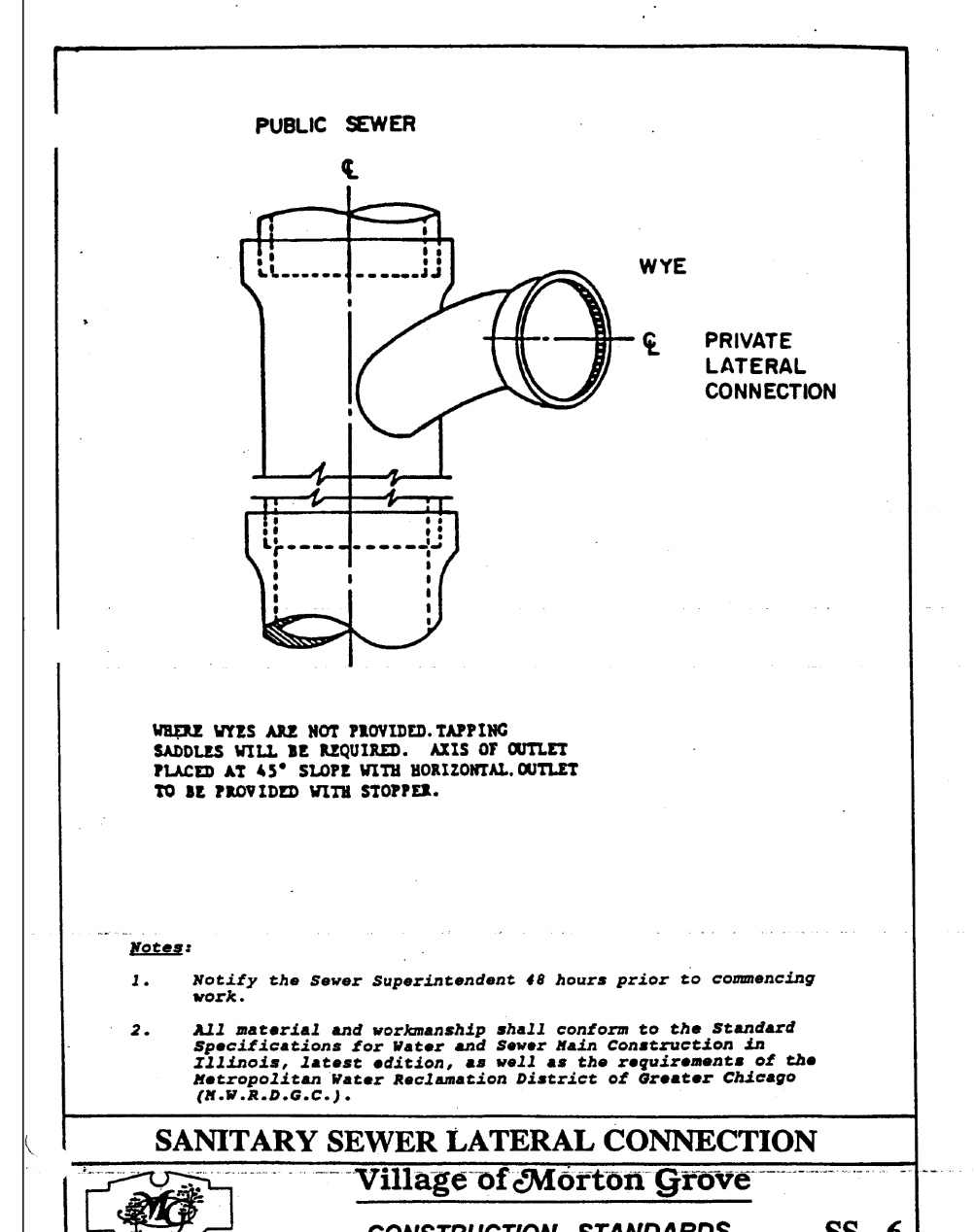
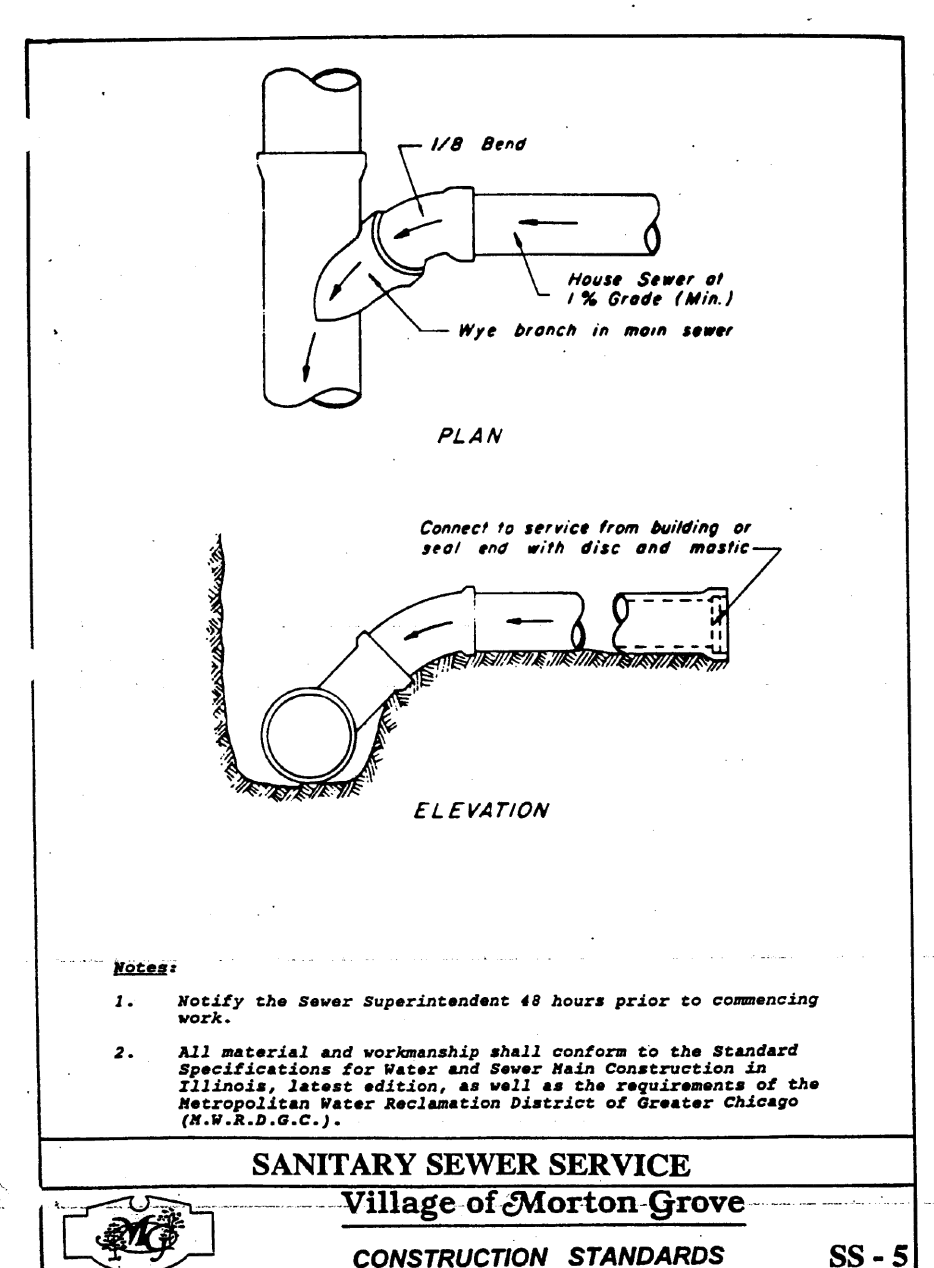
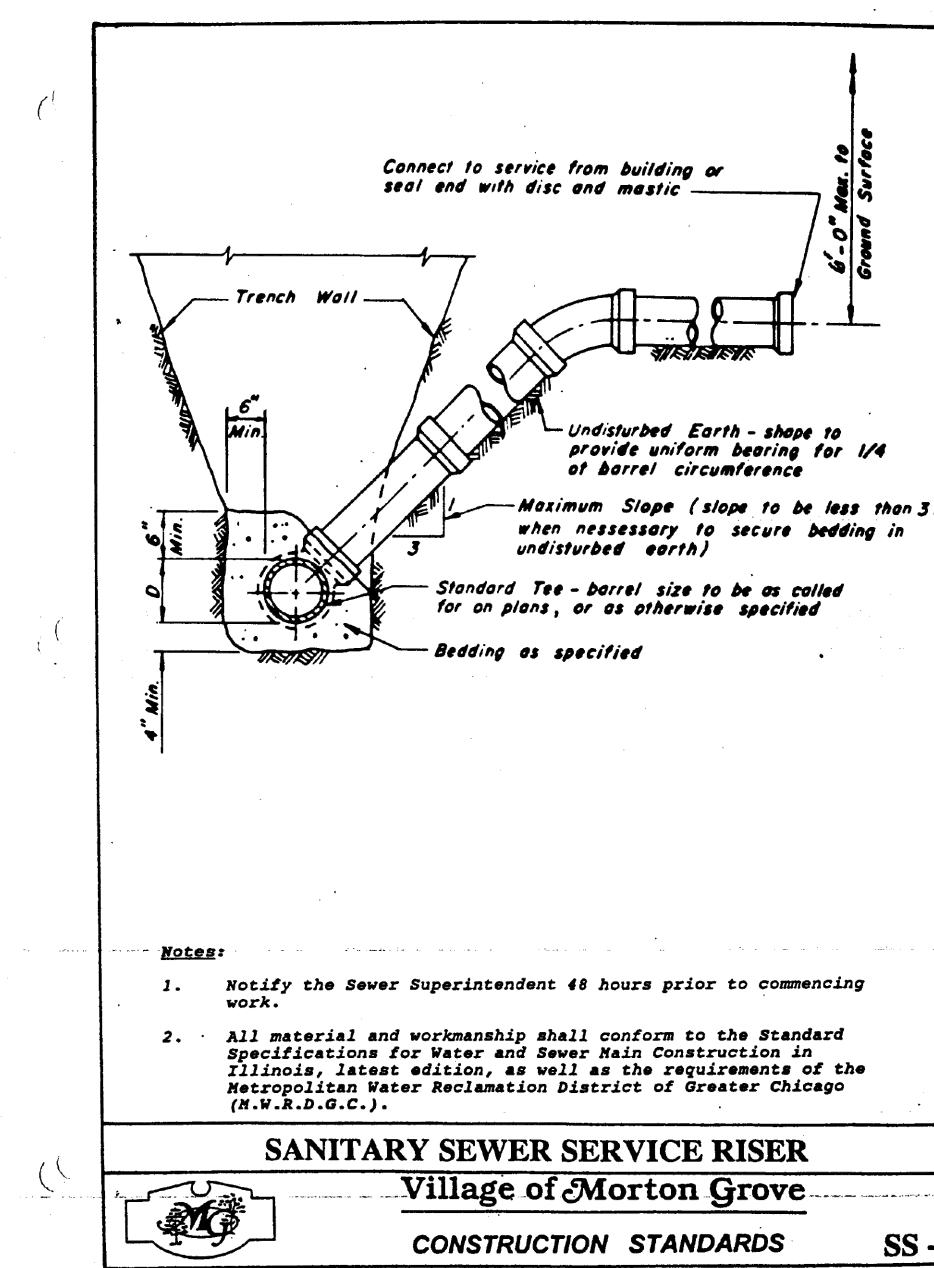
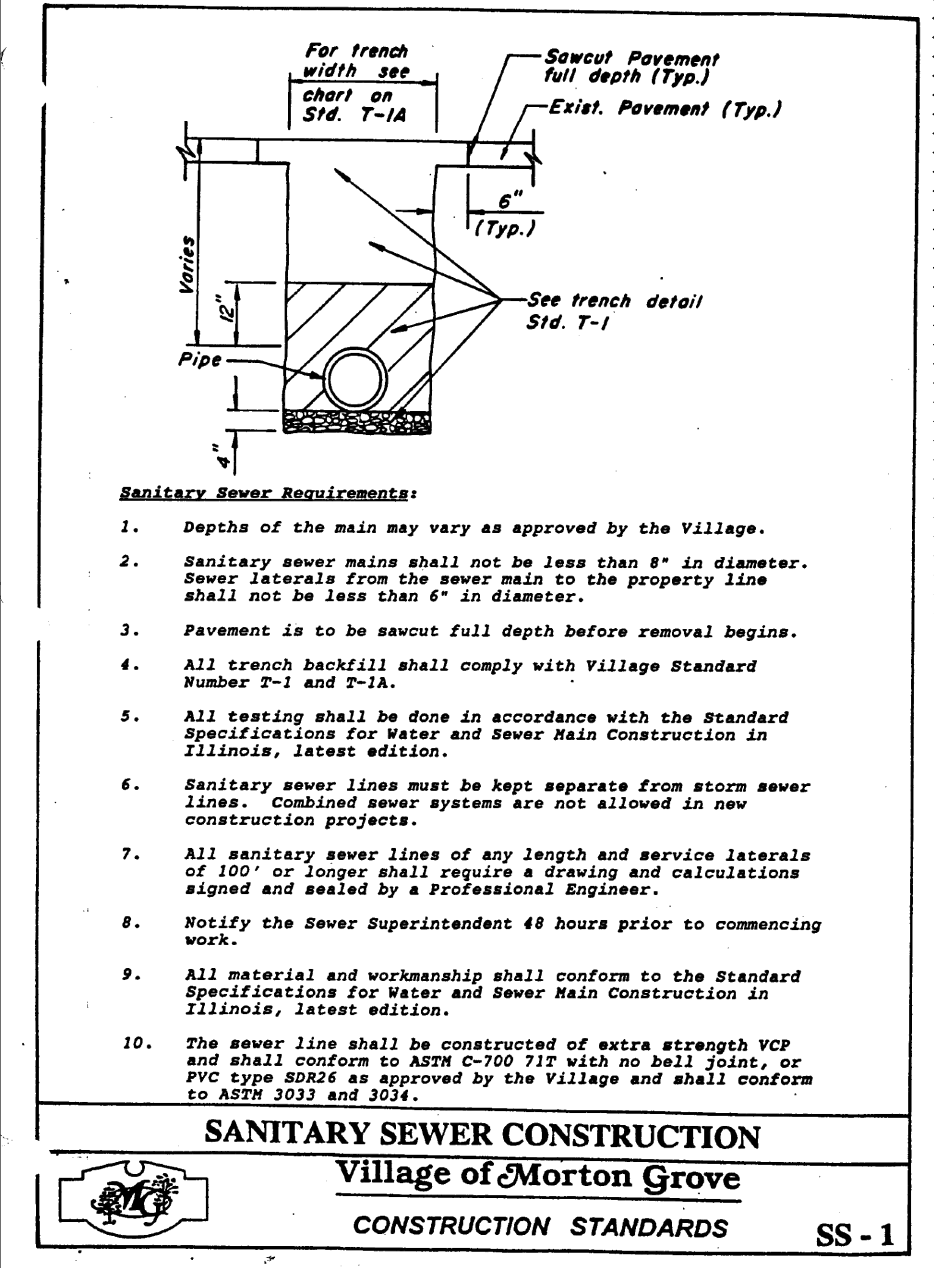
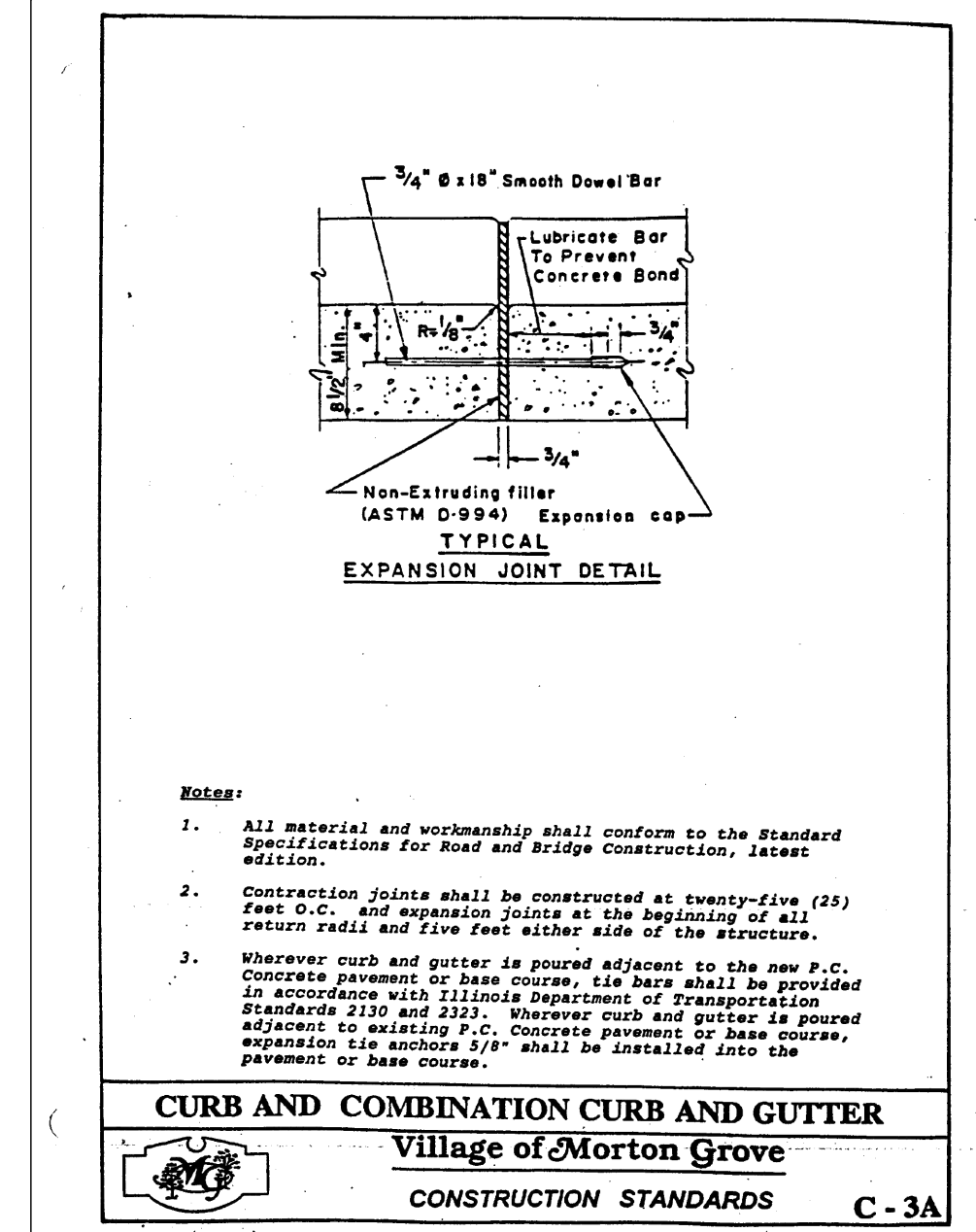
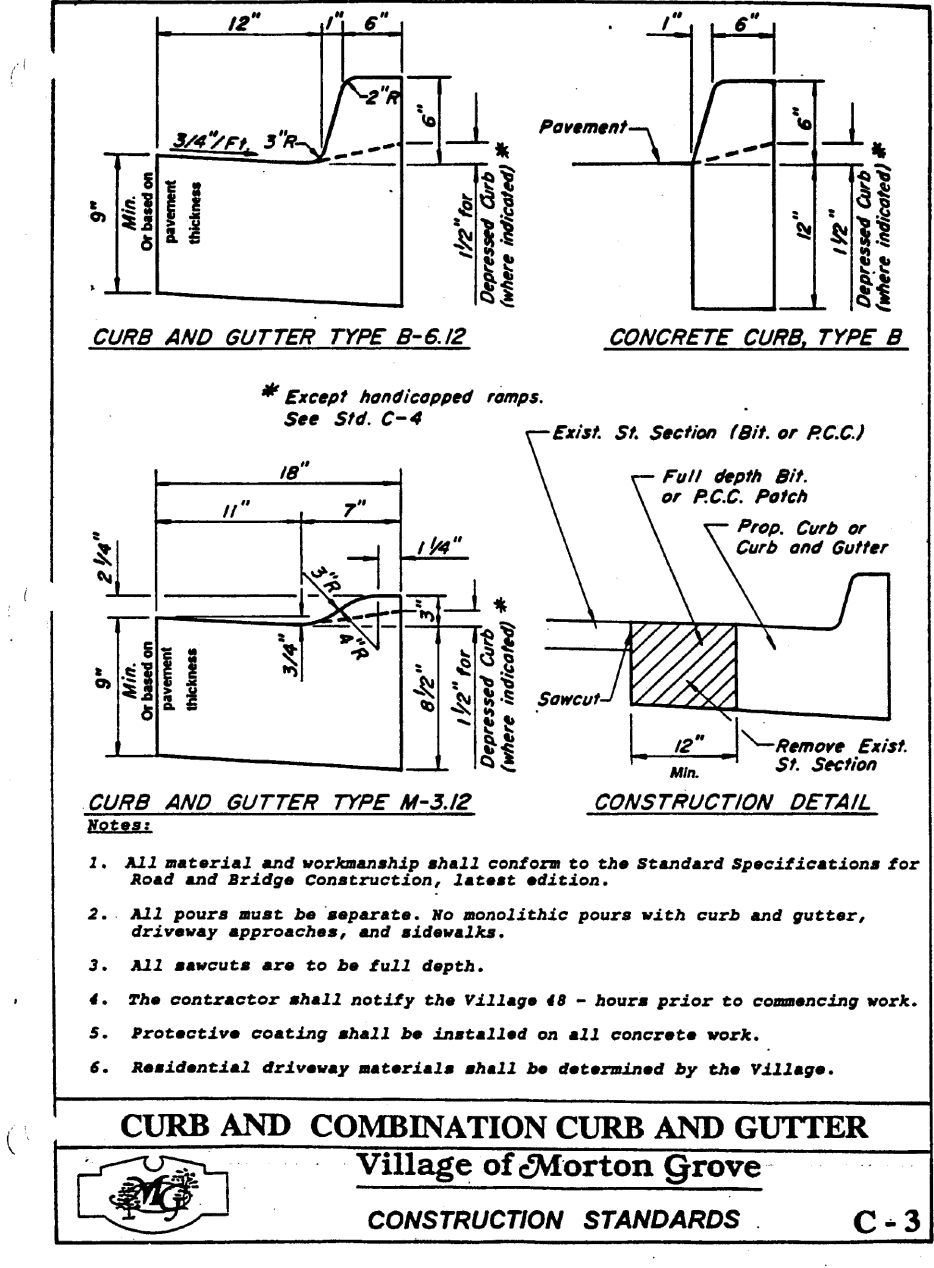
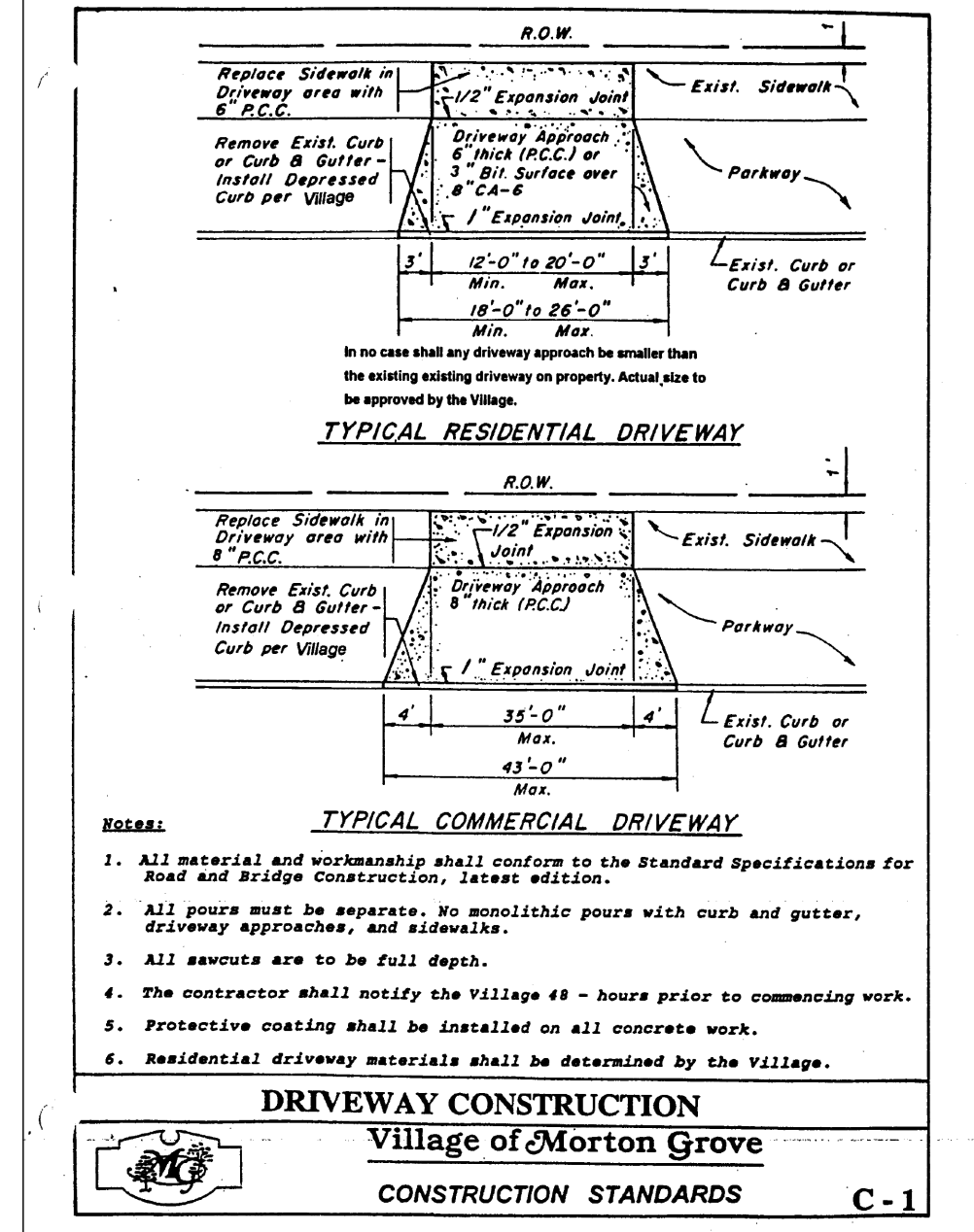
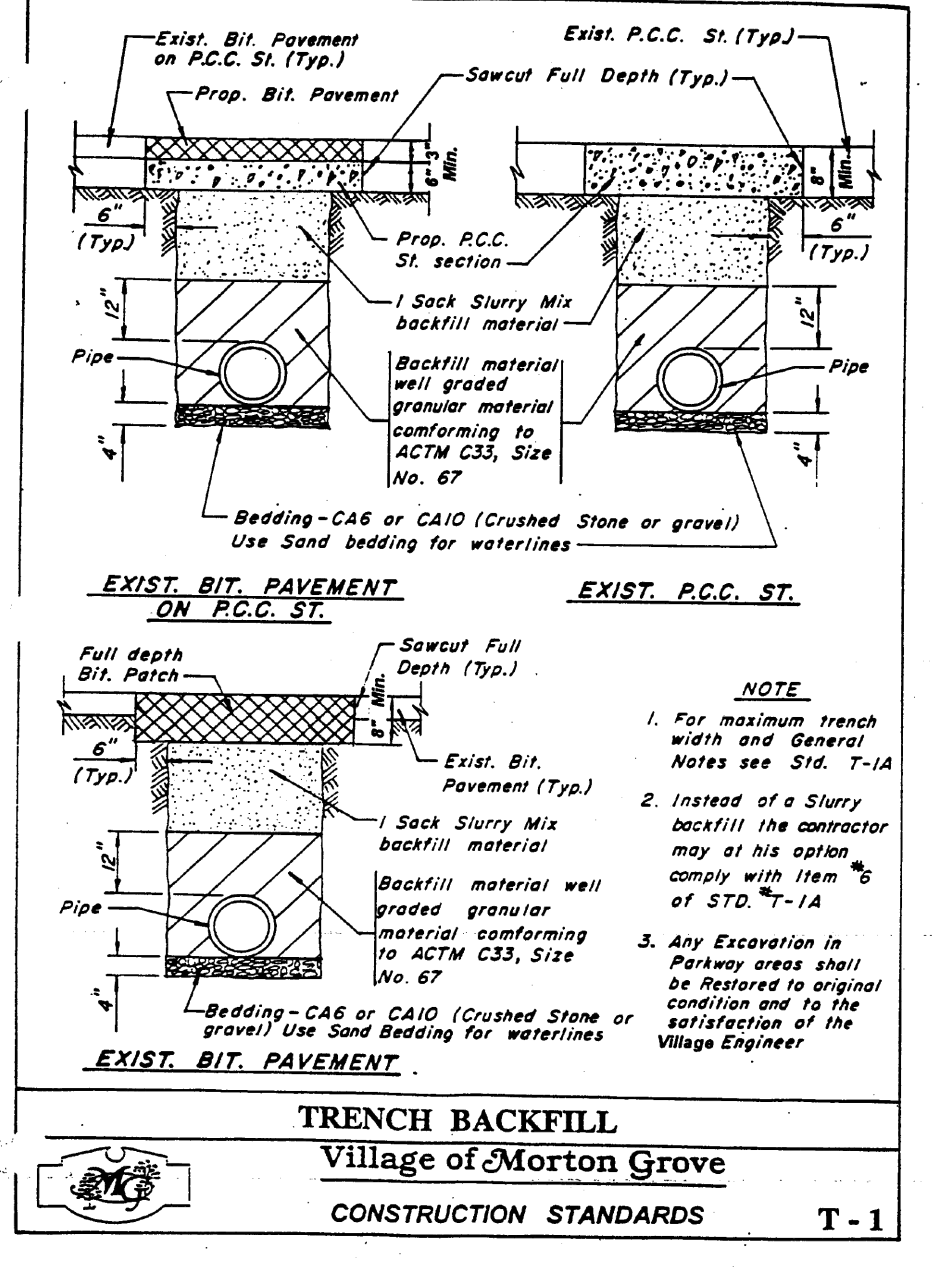
- 7. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS FROM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA SHALL CONFORM TO THE FOLLOWING:
PIPE MATERIAL PIPE SPECIFICATIONS JOINT SPECIFICATIONS
VITRIFIED CLAY PIPE ASTM C700 ASTM C454
REINFORCED CONCRETE SEWER PIPE ASTM C400 ASTM C454
CAST IRON SOIL PIPE ASTM A74 ASTM C564
DUCTILE IRON PIPE ANSI A21.51 ANSI A12.11
POLYETHYLENE GLYCOL (PE) PIPE 48" TO 36" DIAMETER SDR 26 ASTM D-3034 ASTM D-3212
48" TO 36" DIAMETER SDR 26 ASTM D-3034 ASTM D-3212
HIGH DENSITY POLYETHYLENE (HDPE) ASTM D-3350 ASTM D-3261-F-2020 (HEAT FUSION)
ASTM D-3350 ASTM D-3212-47 (GASKETED)
WATER MAIN QUALITY PVC 48" TO 36" DIAMETER ASTM D-2411 ASTM D-2672 OR ASTM D-3139
48" TO 36" DIAMETER AWWA C900 ASTM D-3212
48" TO 36" DIAMETER AWWA C900 ASTM D-3212

- 8. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), INCLUDING ALL TRENCHES, SHALL BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT) TO THE OUTSIDE EDGE OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN SEVEN (7) INCHES. MATERIAL SHALL BE CALL 11 OR CA-25 AND SHALL BE EXTENDED AT LEAST 12' ABOVE THE TOP OF THE PIPE WHEN USING PIPE.
9. "HAND SEAL" OR SIMILAR NON-SHAIR ELEVATOR-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DIFFERENT MATERIALS.
10. BELOW THE FLOOD PROTECTION ELEVATION (FPE = FFE + 3 FEET), ALL SANITARY SEWER MANHOLES AND STRUCTURES SHALL BE CONSTRUCTED WITH WATER TIGHT TILES. WATER TIGHT TILES SHALL BE CONSTRUCTED WITH A COMBINED PICKLE AND WATER TIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE TILES.
11. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING VIE, TIE, OR AN EXISTING MANHOLE ONE OF THE FOLLOWING METHODS SHALL BE USED:
A) A CIRCULAR SAWCUT OF SEWER MAIN BY PROPER TOOLS (EITHER "TOP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF RUBBER GASKET OR W-RITE GASKET.
B) REMOVE AN EXISTING SECTION OF PIPE BREAKING ONLY AT THE TOP OF THE BELL) AND REPLACE WITH NEW PIPE

TRENCH BACKFILL
Village of Morton Grove
CONSTRUCTION STANDARDS T-1A

Notes:

- Definition of one (1) Shury Mix - one (1) sack cement to one (1) cubic yard sand to be tamped and delivered.
- Contractor is to remove and dispose of all excavated material off-site.
- Contractor shall excavate six (6) inches each side of the trench for removal. All excavations shall be full depth.
- Trenches shall not exceed five (5) feet in depth without proper shoring and permission. OSHA notification will be required.
- Trench is to be excavated to firm, undisturbed soil. If over excavation is required to reach a firm trench bottom, the contractor shall fill the void with old and compact to obtain proper density and grade.
- Instead of shury backfill, the contractor at the Village's option, utilize trench backfill as specified in the 2008 "Standard Specifications for Road and Bridge Construction - Illinois, latest edition." Compaction tests shall be required in locations approved by the Village and these tests shall be paid for by the contractor. Backfill and compaction will be performed on every other lift. All lifts shall have 95% compaction or better. The contractor shall also furnish the Village with a copy of the final compaction report.
- All bituminous and portland cement concrete pavement shall meet the requirements of and be constructed in accordance with the Standard Specifications for Road and Bridge Construction, latest edition.
- Minimum thickness of pavement based on type of street.



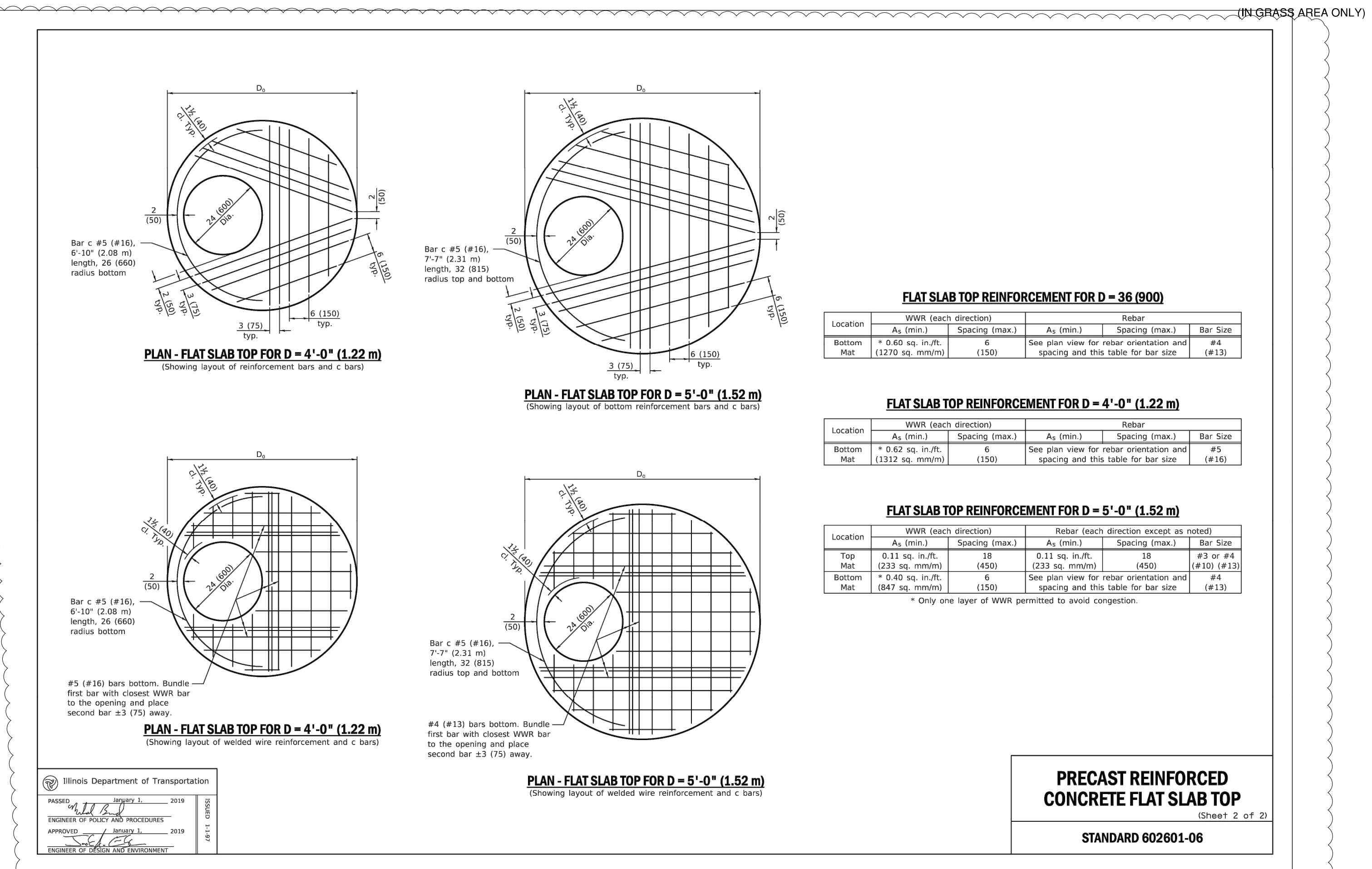
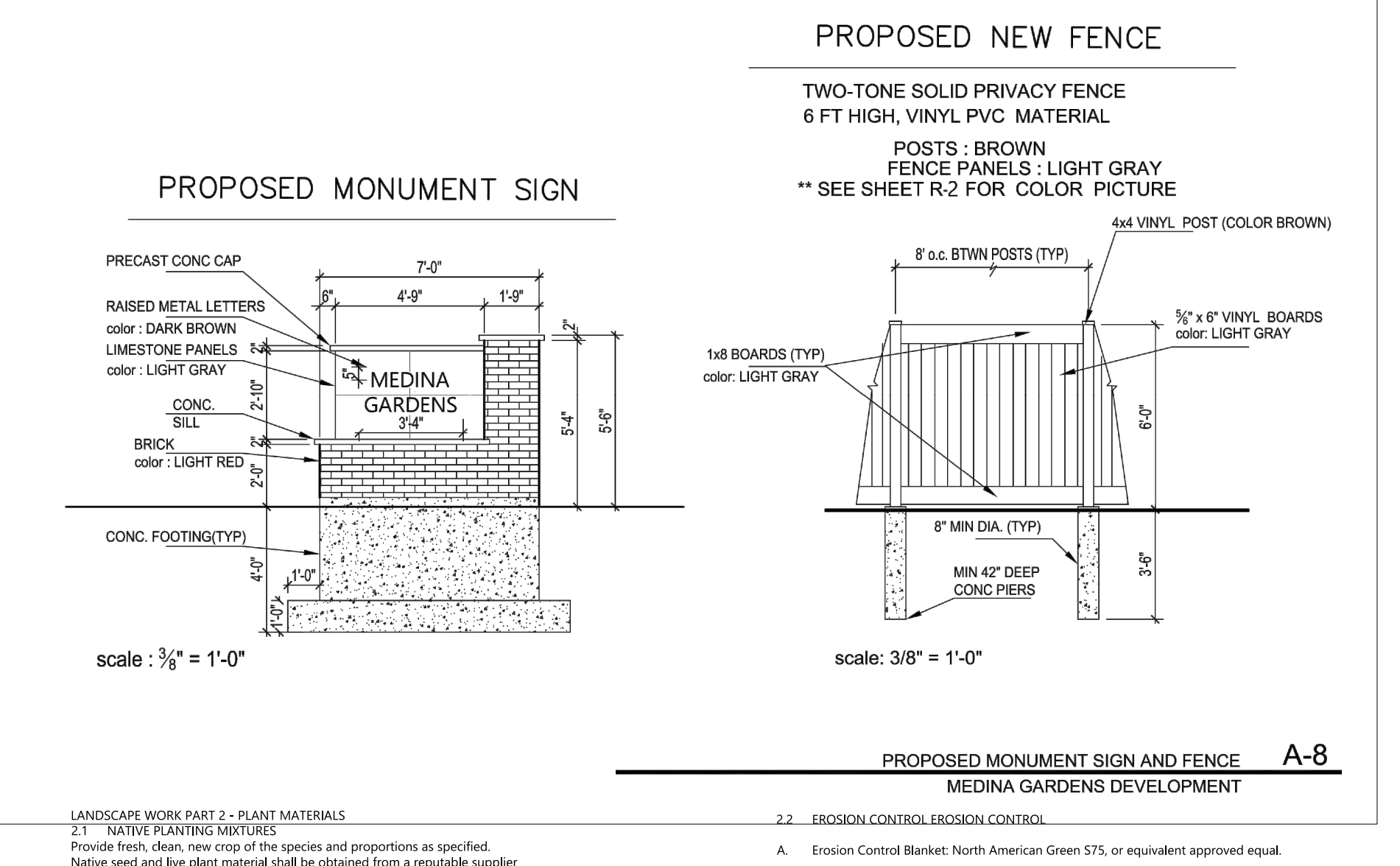
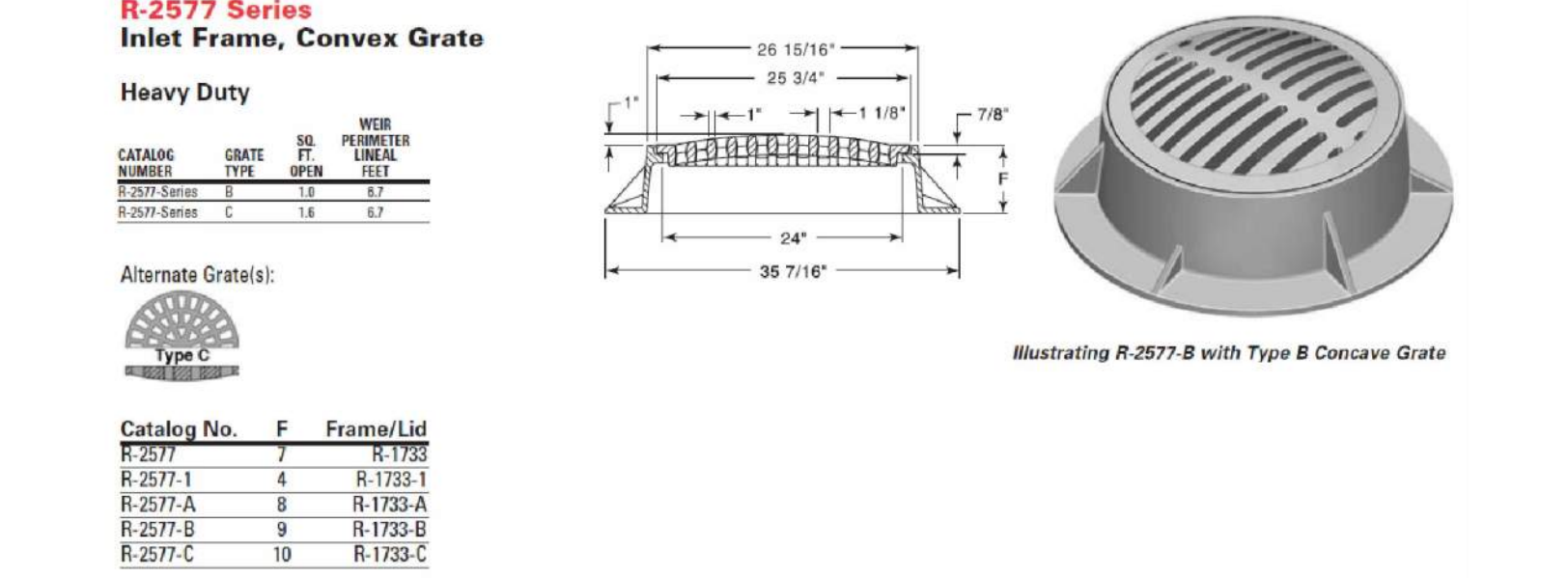
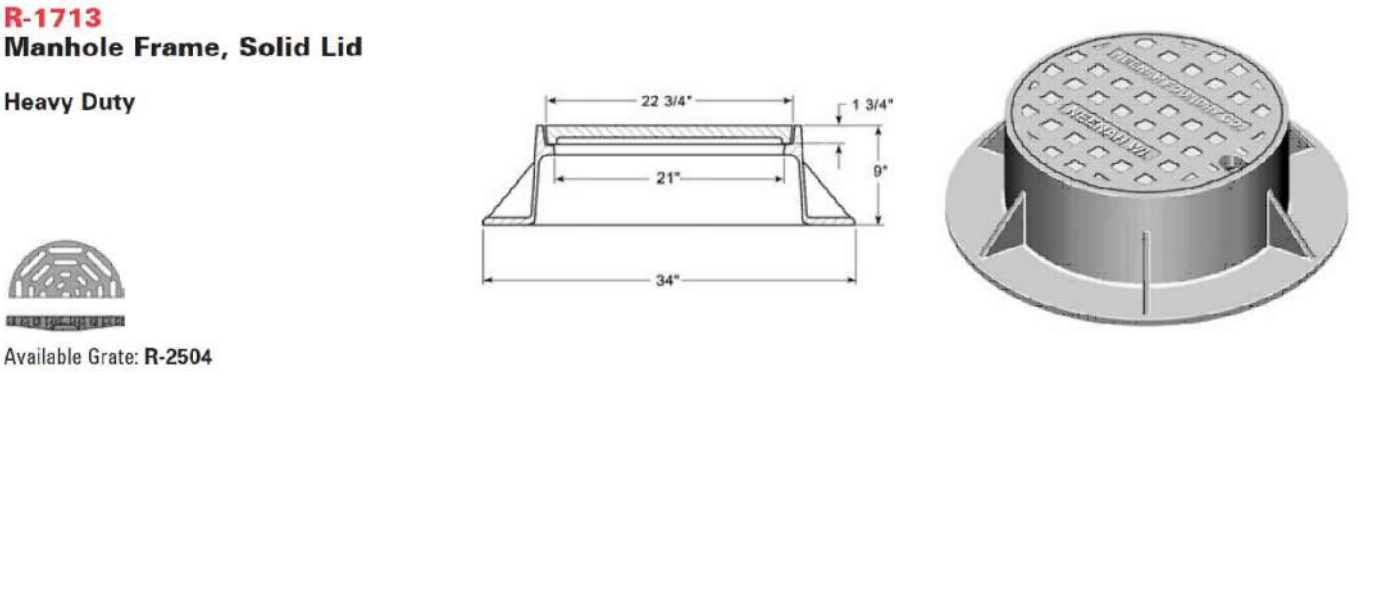
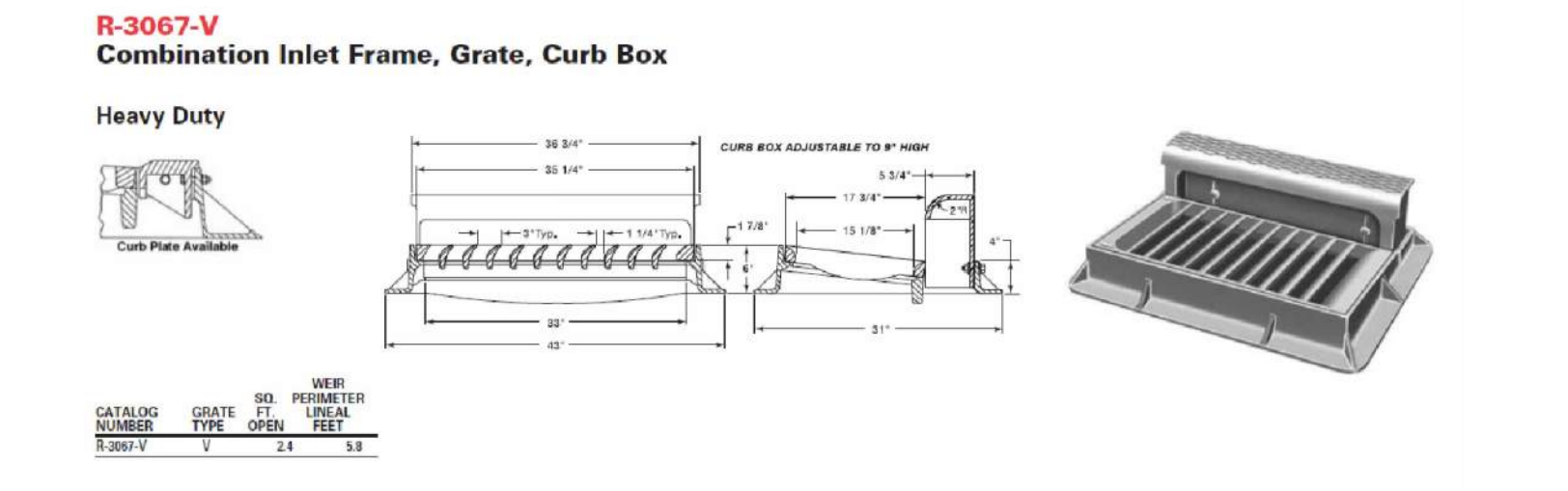
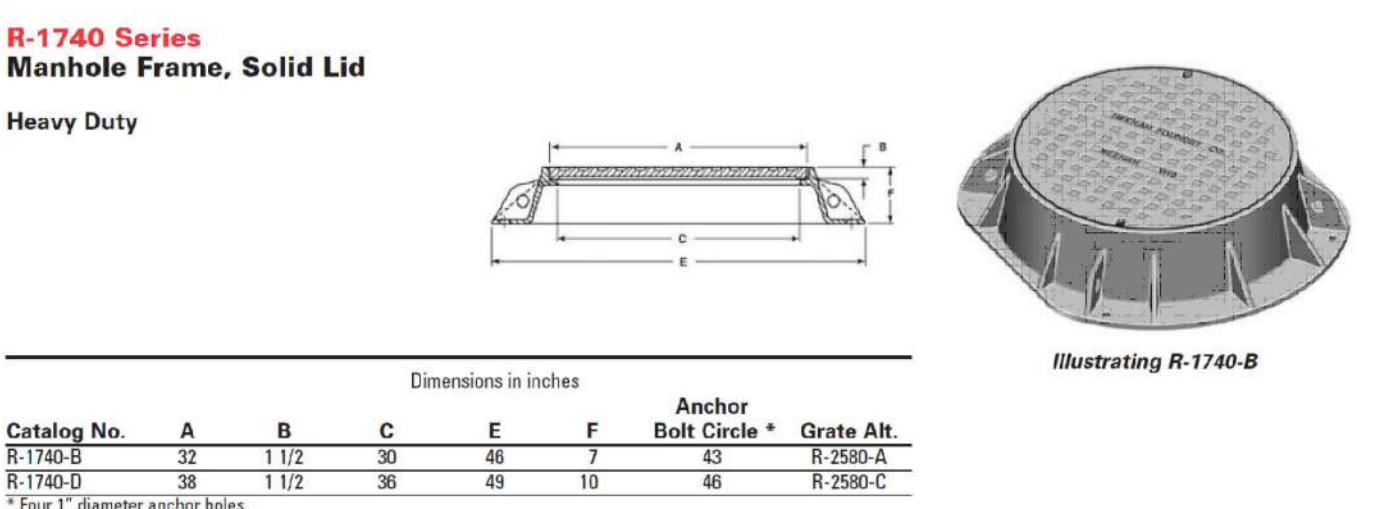
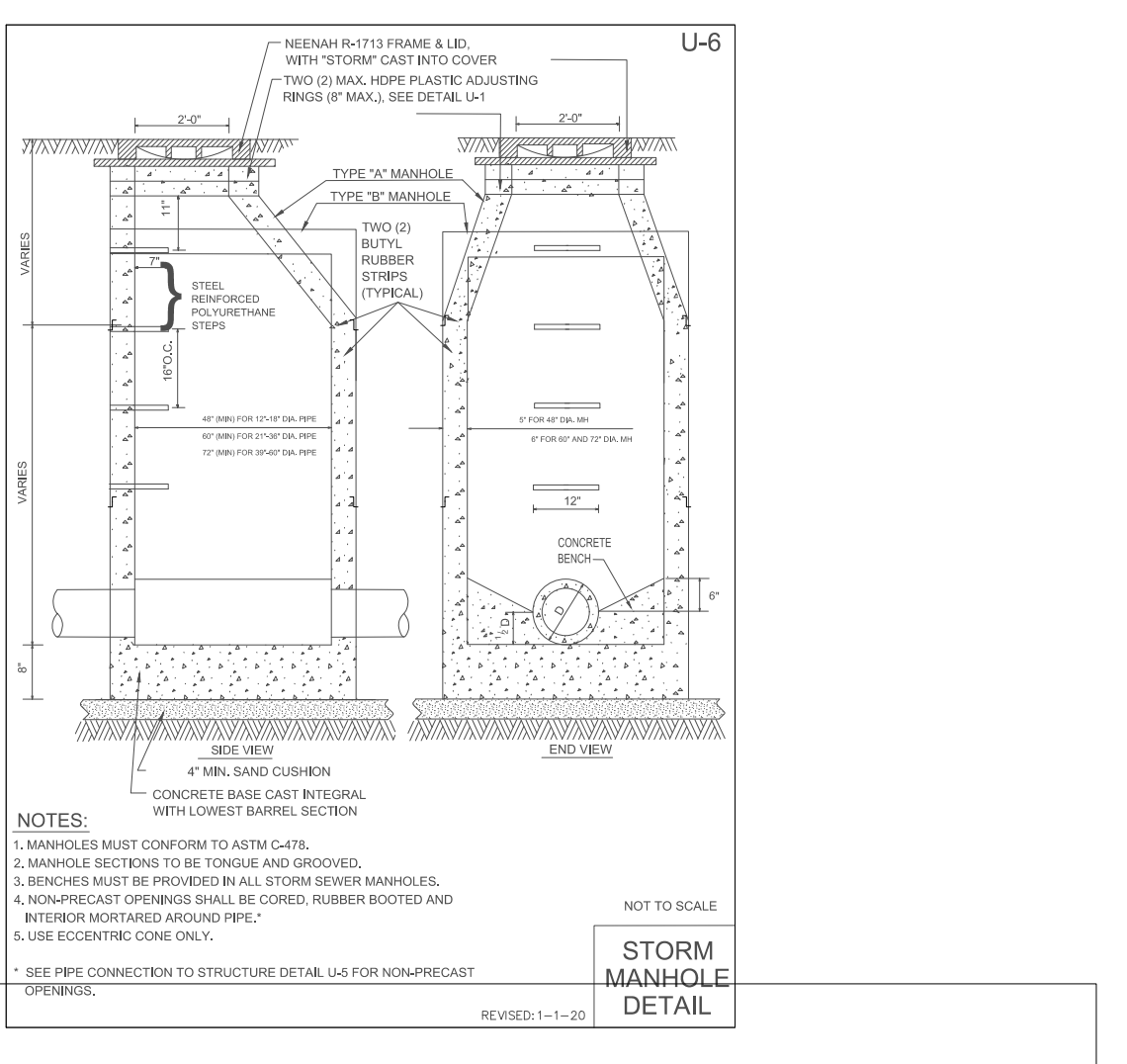
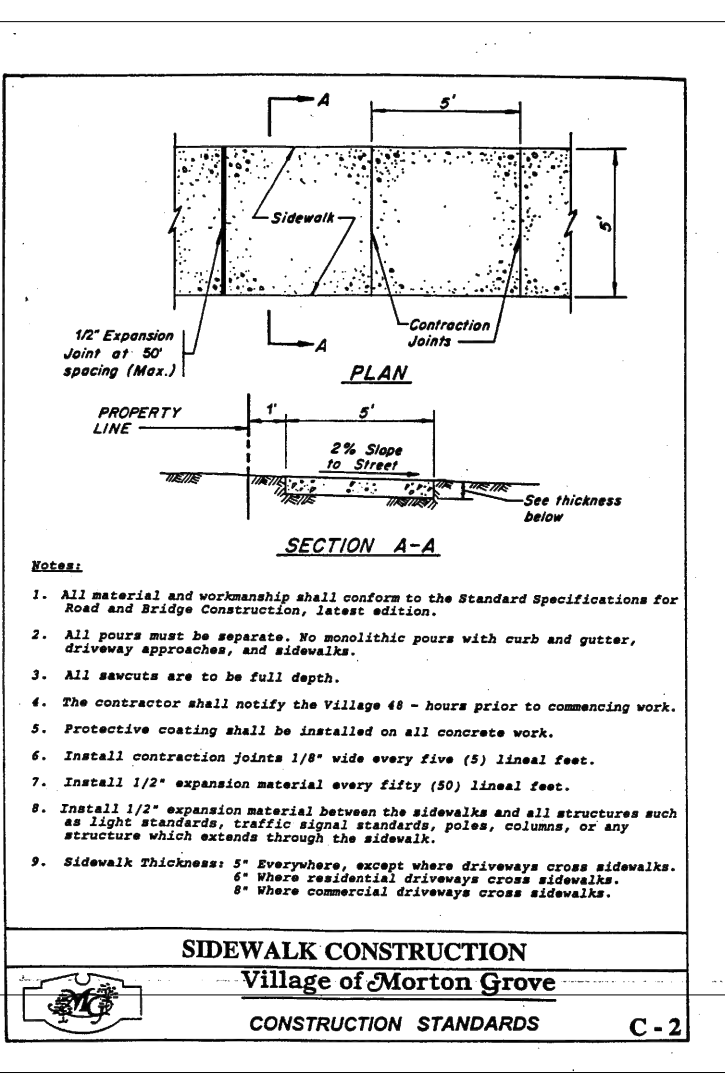
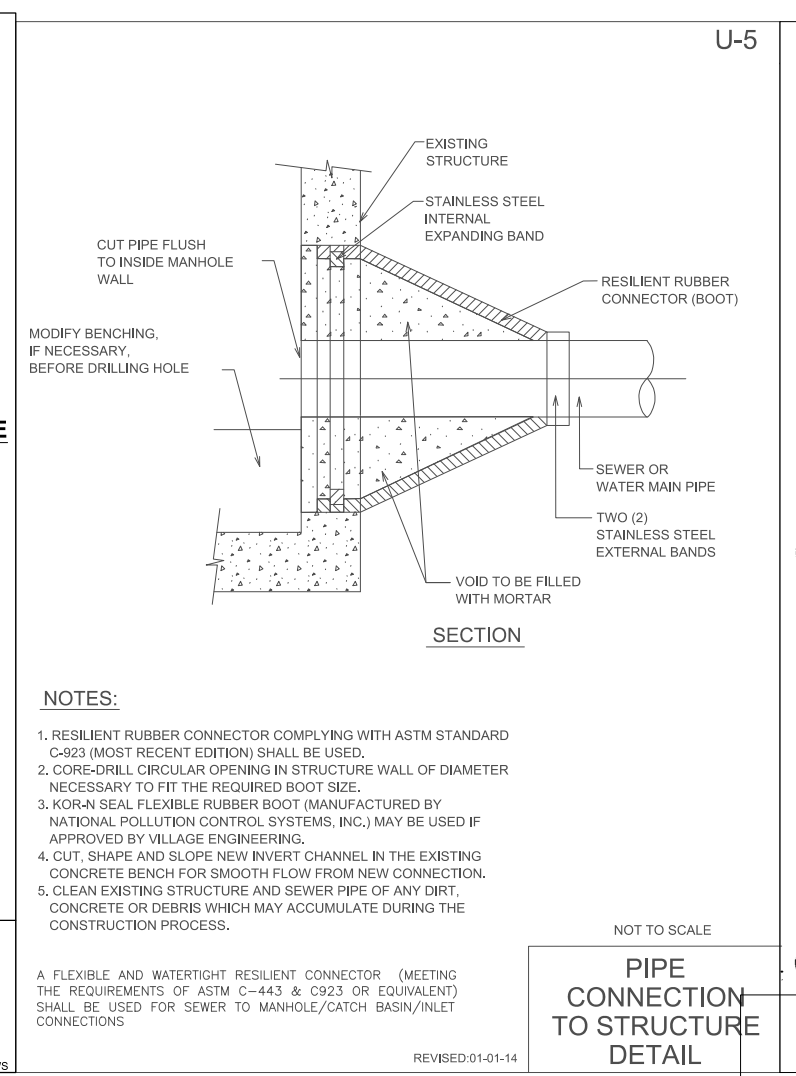
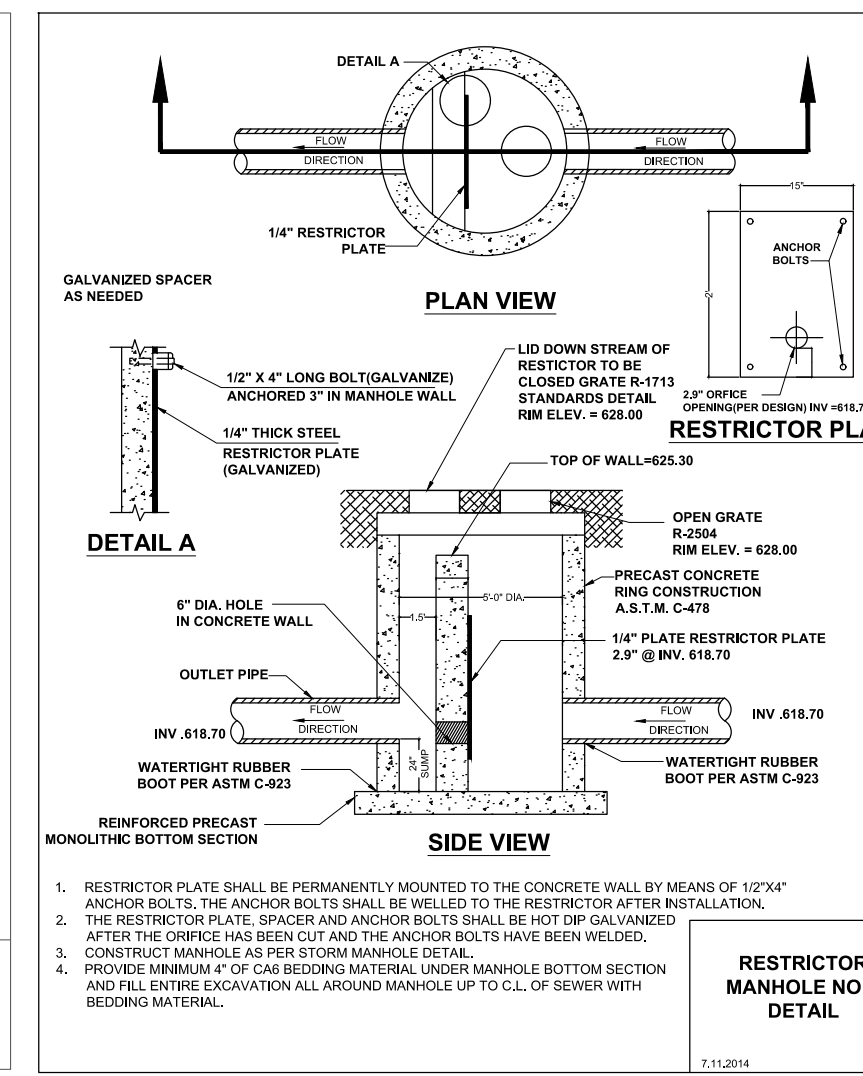
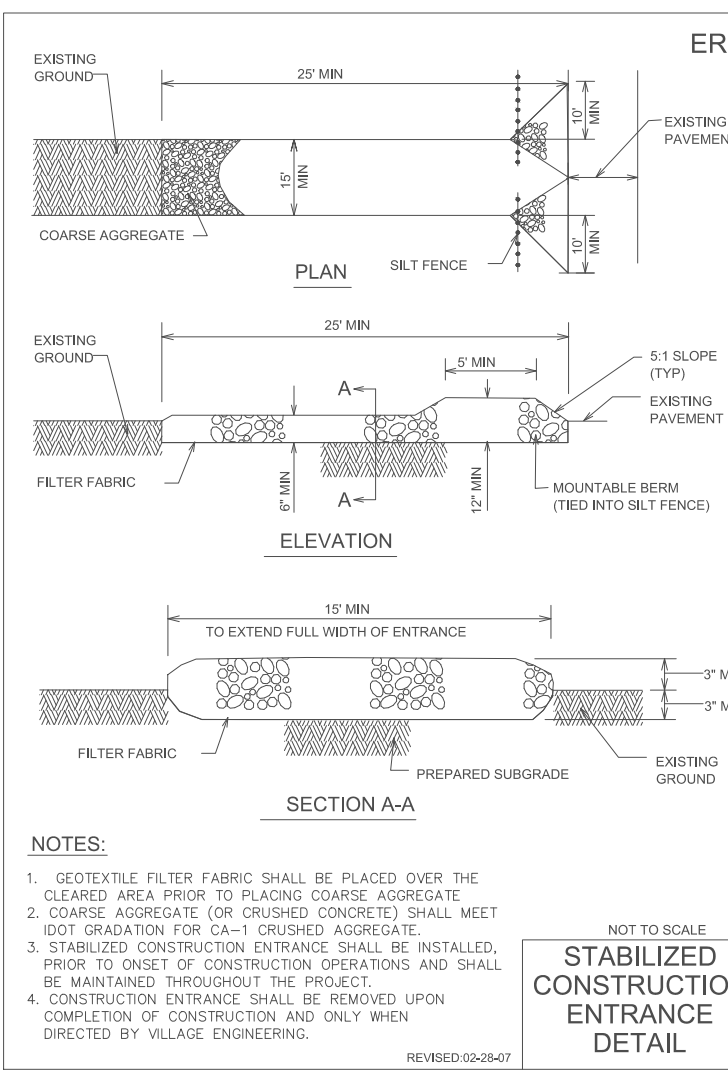
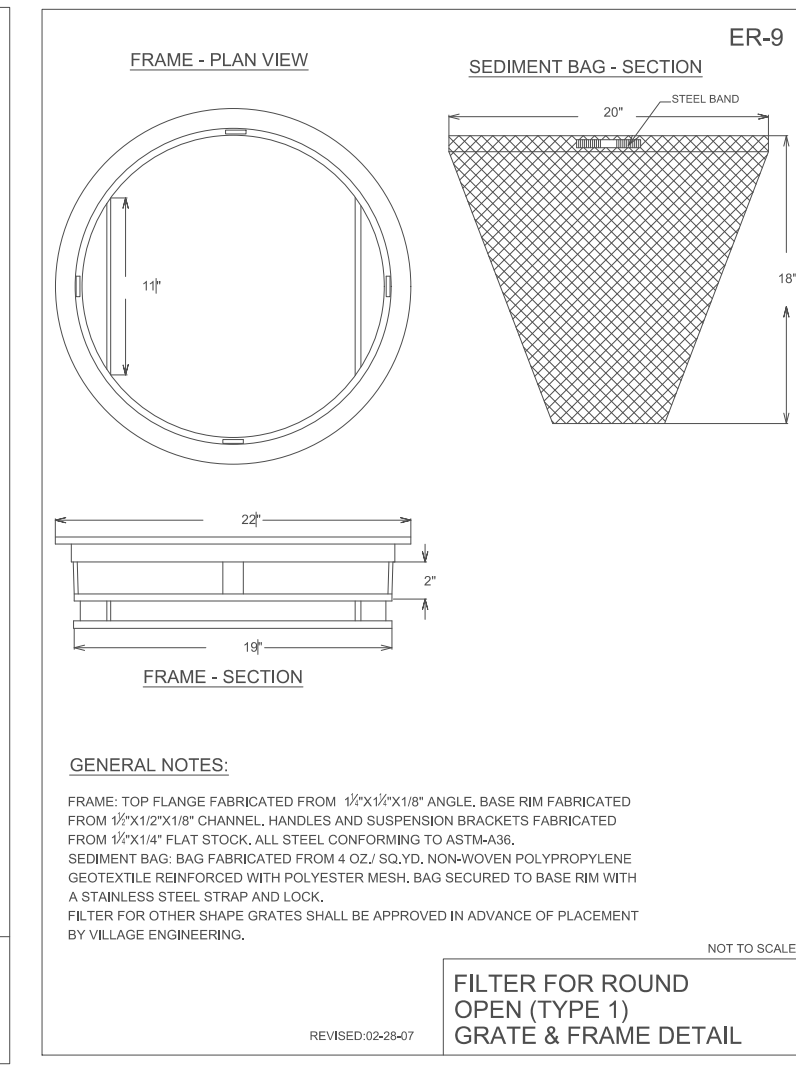
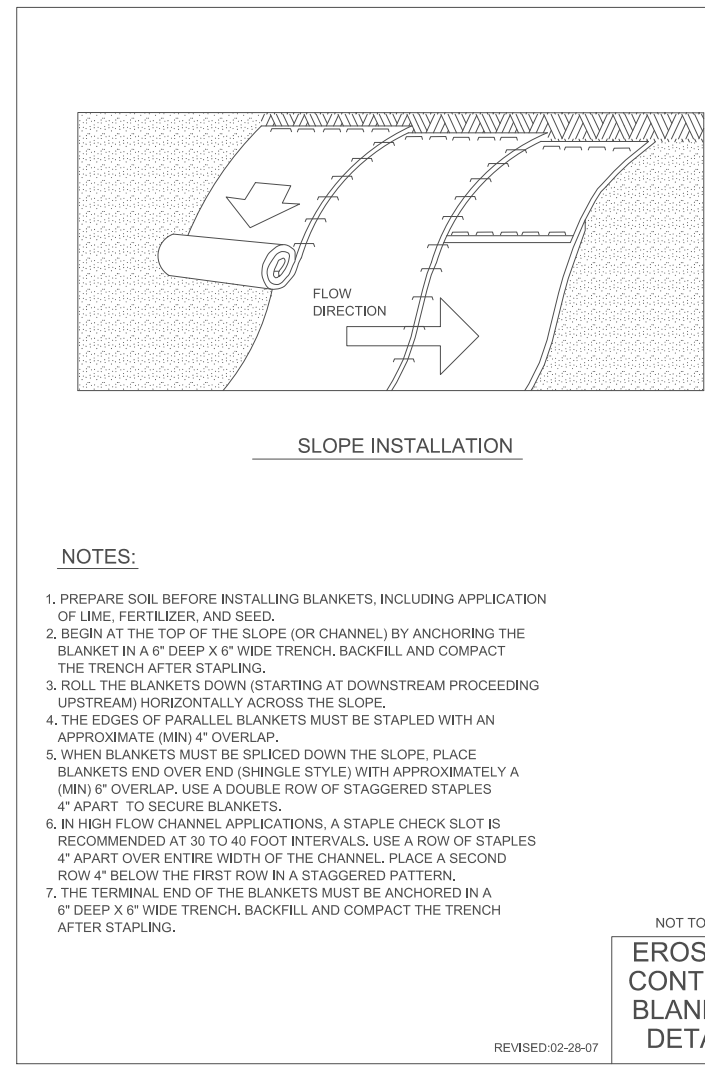
BCI BONO CONSULTING, INC.
CIVIL ENGINEERS

1018 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: (847) 823-3300
FAX: (847) 823-3303
bbono@bonoconsulting.com

REGISTERED PROFESSIONAL ENGINEER
ILLINOIS
EXP. 11-30-17

STANDARD DETAILS
MEDINA GARDENS PLANNED DEVELOPMENT
6021-6037 LINCOLN, MORTON GROVE, COOK COUNTY, IL

PROJECT NUMBER: 17239
START DATE: JUN. 10, 2017
GRAPHIC SCALE: 0
SCALE: NTS
SHEET NUMBER: 19 OF -



DATE	REVISIONS	PROJECT STAFF	ISSUE
02-20-2015		B. BOND (E)	1. ISSUE FOR PERMIT
		A. VED (E)	
		J. BACON (E)	
		T. BACON (E)	

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bbono@bonoconsulting.com

ABHIJIT VEER
REGISTERED PROFESSIONAL ENGINEER
OF ILLINOIS
EXP. 11-30-21

STANDARD DETAILS

MEDINA GARDENS PLANNED DEVELOPMENT
6021-6037 LINCOLN, MORTON GROVE, COOK COUNTY, IL

PROJECT NUMBER: 17239
START DATE: JUN. 10, 2017
GRAPHIC SCALE: 0
SCALE: NTS
SHEET NUMBER: 20 OF -

ILLINOIS Department of Transportation
PASSED BY: [Signature] 2019
ENGINEER OF POLICY AND PROCEDURES
APPROVED BY: [Signature] 2019
ENGINEER OF DESIGN AND ENVIRONMENT



EXISTING DEP STORAGE NORTH BASIN

CONTOUR	HEIGHT BETWEEN CONTOURS(FT.)	AREA OF CONTOUR (SQ.FT)	VOLUME (CU.FT)
626.41		8092	
626.2	0.21	3214	1187.09
626	0.2	1933	514.71
625.8	0.39	189	376.93
625.61	0.19	0	17.95
TOTAL DETENTION			2096.69

EXISTING DEP STORAGE SOUTH BASIN

CONTOUR	HEIGHT BETWEEN CONTOURS(FT.)	AREA OF CONTOUR (SQ.FT)	VOLUME (CU.FT)
626.41		10864	
626.2	0.21	4732	1637.59
626	0.2	1555	628.68
625.8	0.39	397	303.26
625.61	0.19	0	37.72
TOTAL DETENTION			2607.24
TOTAL EXISTING DETENTION			4703.92

STORM WATER MANAGEMENT SUMMARY:

EXISTING DEPRESSIONS STORAGE AREA UP TO ELEV. 626.41 -	4,703 CU FT
REQUIRED DETENTION PER VILLAGE OF MORTON GROVE -	18,000 CU FT
VOLUME CONTROL PER MWRD -	3,448 CU FT
TOTAL STORAGE REQUIRED -	26,151 CU FT

DATE	REVISIONS
05-20-08	

PROJECT STAFF	ISSUE
PROJECT MANAGER	B. BOARD
ENGINEER	A. VED P.E.
TECHNICAL	JL. BALOW

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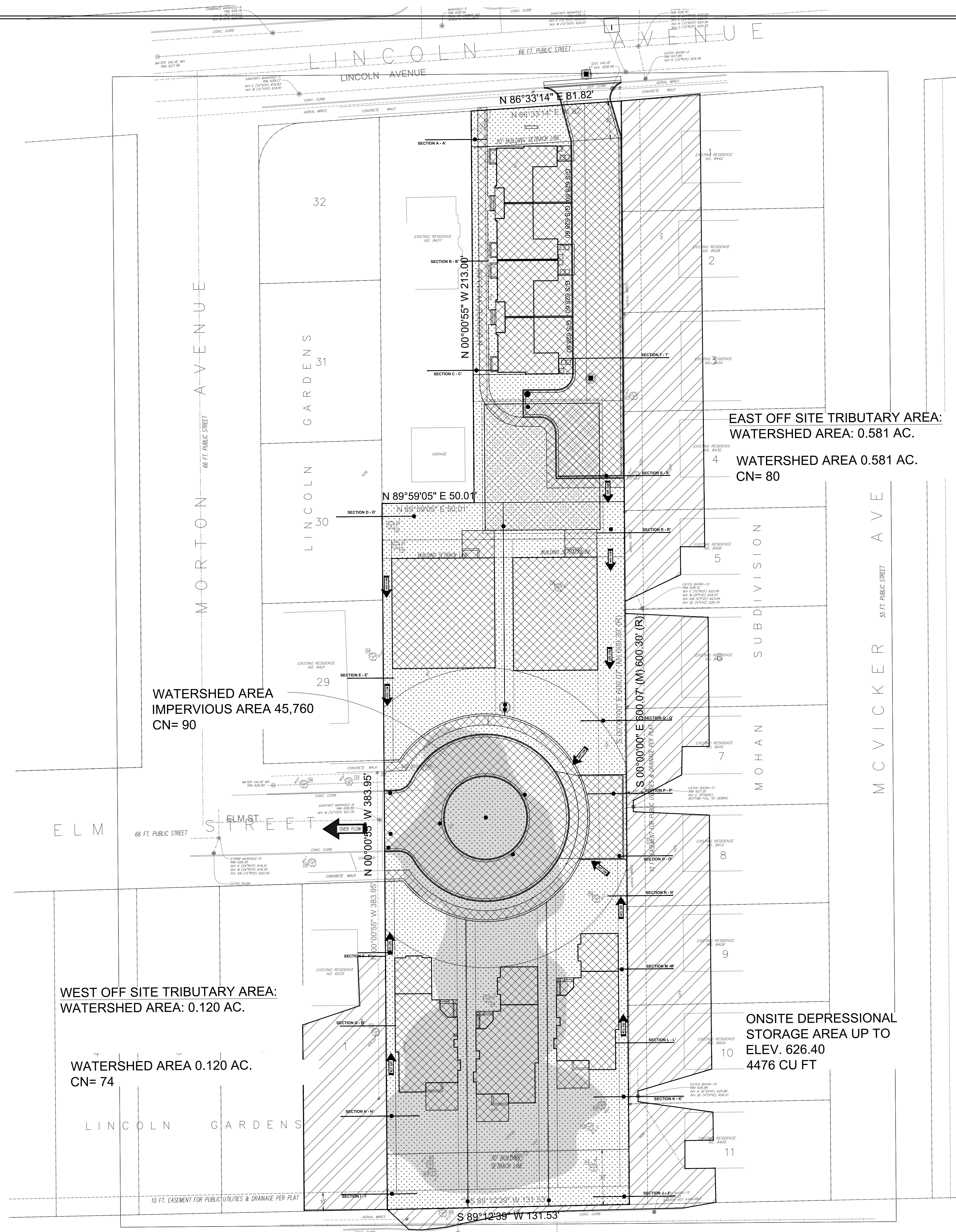
DEPRESSIONAL STORAGE AREA EXHIBIT
 MEDINA GARDENS PLANNED DEVELOPMENT
 6021-6037 LINCOLN, MORTON GROVE, COOK COUNTY, IL

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PROJECT NUMBER: 17239
 START DATE: JUN. 10, 2017
 GRAPHIC SCALE: 40 0 40
 SCALE: 1"=40'-0"
 SHEET NUMBER: 21 OF -

OFFSITE TRIBUTARY AREA
 IMPERVIOUS AREA
 PERVIOUS AREA
 EXISTING DEPRESSIONAL STORAGE AREA

EXISTING DEP STORAGE NORTH BASIN			
CONTOUR	HEIGHT BETWEEN CONTOURS (FT.)	AREA OF CONTOUR (SQ. FT)	VOLUME (CU. FT)
626.41	0.21	8092	1187.09
626.2	0.2	3214	514.71
626	0.39	1933	376.93
625.8	0.19	189	17.95
625.61	0	0	0
TOTAL DETENTION			2096.69
EXISTING DEP STORAGE SOUTH BASIN			
CONTOUR	HEIGHT BETWEEN CONTOURS (FT.)	AREA OF CONTOUR (SQ. FT)	VOLUME (CU. FT)
626.41	0.21	10864	1637.59
626.2	0.2	4732	628.68
626	0.39	1555	303.26
625.8	0.19	397	37.72
625.61	0	0	0
TOTAL DETENTION			2607.24
TOTAL EXISTING DETENTION			4703.92



EAST OFF SITE TRIBUTARY AREA:
 WATERSHED AREA: 0.581 AC.
 WATERSHED AREA 0.581 AC.
 CN= 80

WATERSHED AREA
 IMPERVIOUS AREA 45,760
 CN= 90

WEST OFF SITE TRIBUTARY AREA:
 WATERSHED AREA: 0.120 AC.

WATERSHED AREA 0.120 AC.
 CN= 74

ONSITE DEPRESSIONAL STORAGE AREA UP TO ELEV. 626.40
 4476 CU FT

DATE	REVISIONS
01-20-2015	
	ISSUE FOR PERMIT
	1
	B. BOND P.E.
	A. VED P.E.
	M. BACON
	ENGINEER
	TECHNICIAN

BCI
 BONO CONSULTING, INC.
 CIVIL ENGINEERS
 1018 BUSSE HIGHWAY
 PARK RIDGE, IL 60068
 PH : (847) 823-3300
 FAX: (847) 823-3303
 bbono@bonoconsulting.com

DRAINAGE AREA EXHIBIT
 MEDINA GARDENS PLANNED DEVELOPMENT
 6021-6037 LINCOLN, MORTON GROVE, COOK COUNTY, IL

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PROJECT NUMBER: 17239
 START DATE: JUN. 10, 2017
 GRAPHIC SCALE: 30 0 30
 SCALE: 1"=30'-0"
 SHEET NUMBER: 22 OF -

MATCH LINE SEE L.1

* ALL 5 PRIVATE DRIVEWAY SHAPES ARE ONLY HYPOTHETICAL AND WILL BE A SUBJECT OF FUTURE HOMEOWNERS DRIVEWAY CONFIGURATION DECISIONS

ELM STREET

LEGEND

GROUND COVER

HARDWOOD MULCH USE AGED MULCH ONLY
 SNOW STORAGE AREA USE AGED MULCH ONLY, APPLY 2 TO 3 INCH LAYER EXTENDING 12 INCHES PAST ALL SHRUB FOLIAGE. SHRUB TRUNK SHOULD NOT BE COVERED

	COMMON NAME	BOTANIC NAME	HEIGHT	WIDTH	QUANTITY
F1	SEASONAL PLANTS				
SHRUBS					
S1	AMERICAN BOXWOOD	BUXUS SEMPERVIRENS	18 INCH	18 INCH	30
S2	ANNABELLE HYDRANGEA	HYDRANGEA ARBOTESCENS GRANDIFLORA ANNABELLE	18 INCH	18 INCH	6
S3	BURNING BUSH	EUONYMUS ALATUS	3 FT	2 FT	11
S4	RED DOGWOOD	CORMUS BEILEYI	4 FT	3 FT	18
S5	ORNAMENTAL PERENNIAL GRASS (SWITCH, ZEBRA, PAMPASS, FOUNTAIN)		2-3 FT	3-4 FT	78
EVERGREEN TREES AND SHRUBS					
E1	WHITE FIR	ABIES CONCOLOR	6 FT		5
E2	ARBORVITAE THUJA	ARBORVITAE THUJA	5 FT	2 FT, 4 FT SPACING O.C.	18
E3	ANDORRA JUNIPER	JUNIPER HORIZONTALIS	12 INCH	2 FT, 3 FT SPACING O.C.	33
TREES					
T1	SUGAR MAPLE	ACER SACCHARUM	6 FT (2" DIA.)		2
T2	RED OAK	QUERCUS RUBRA	6 FT (2½" DIA.)		1

EXISTING TREE TO REMAIN SEE PRESERVATION SURVEY FOR SIZES AND SPECIES
 FUTURE LANDSCAPING TO BE DETERMINED ONCE THE LOT IS PURCHASED

HARDWOOD MULCH AREA

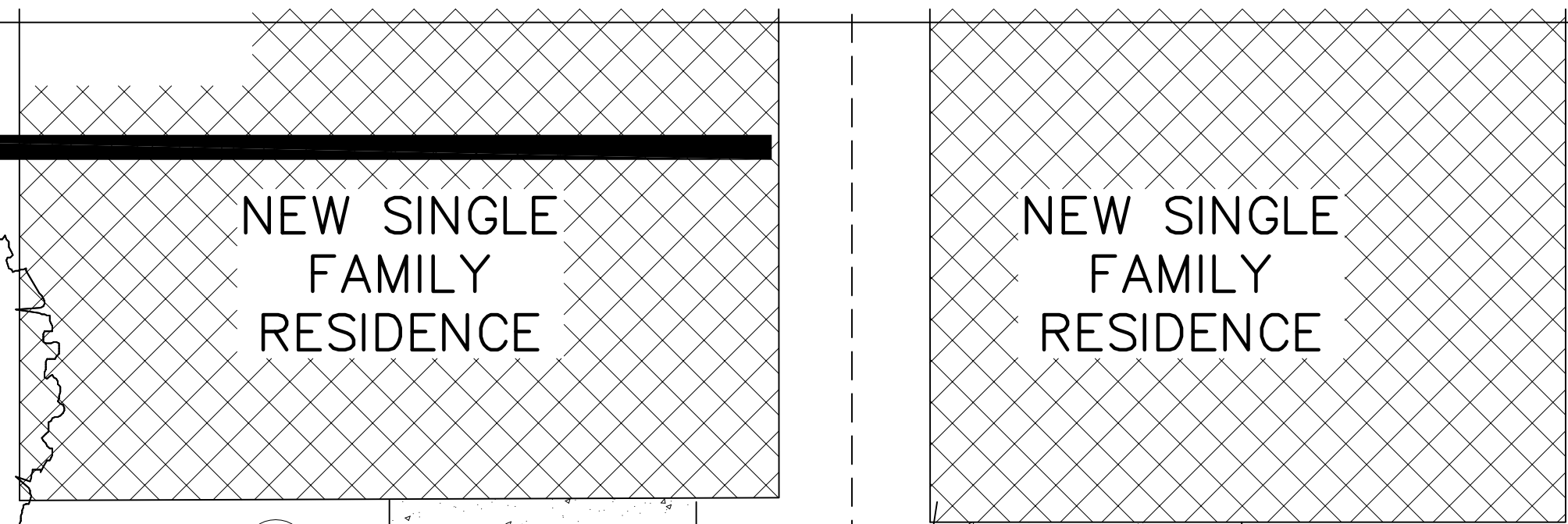
SNOW STORAGE AREA

SCALE : 3/32" = 1'-0"

BEATA M. - KOOLUBA
 BEATA KOOLUBA, ARCHITECT
 100 HOSPITAL AVE. SUITE 205
 BOSTON, MA 02118
 TEL: 617 577 6255
 beata@beataarch.com

DATE: 01-07-2023
 TITLE: MEDINA GARDEN SUBDIVISION LANDSCAPE PLAN - SOUTH LOTS
 SCALE: AS NOTED

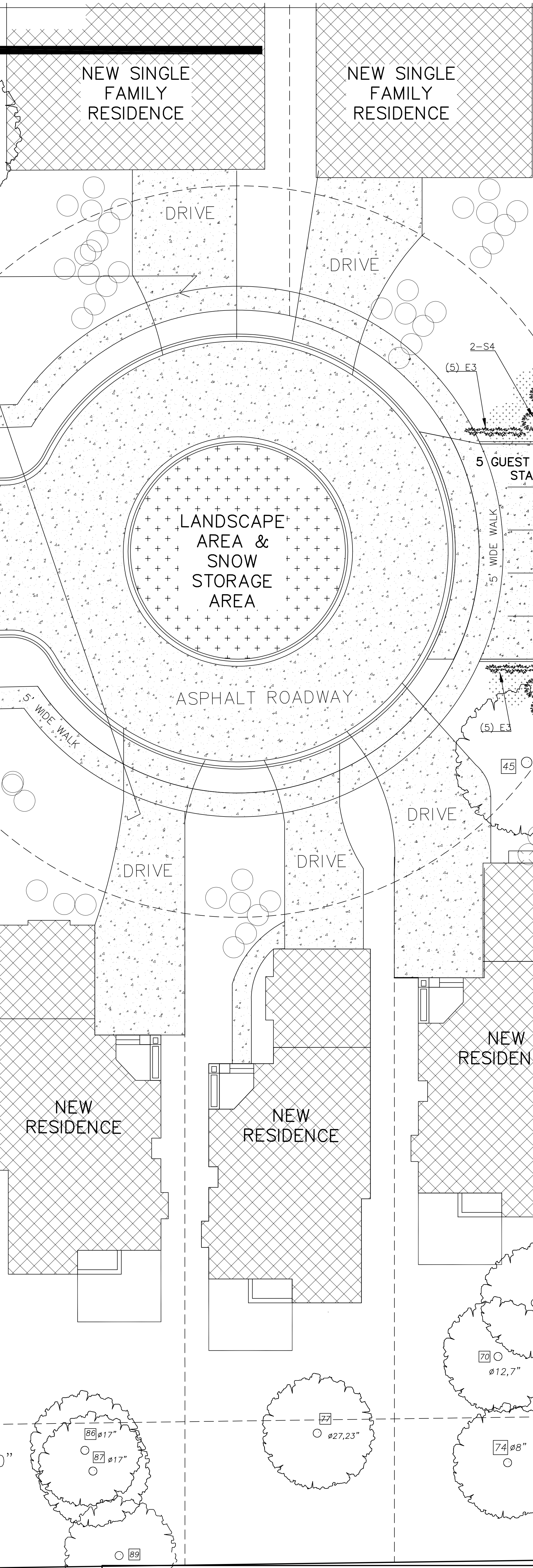
A5



LAYER OF MULCH AROUND SHRUBS AND BUSHES

LAYER OF MULCH AROUND SHRUBS AND BUSHES

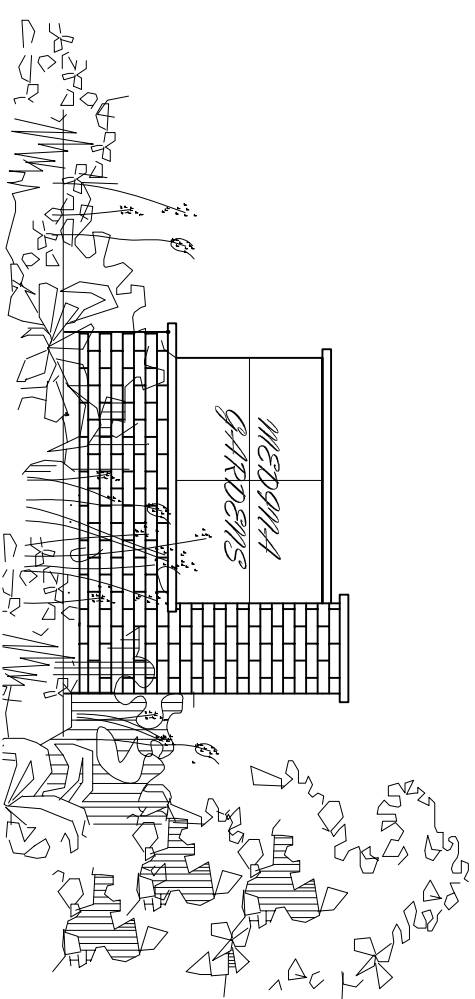
NEW 6 FT HIGH VINYL FENCE



* THIS PLAN ILLUSTRATE THE BULK AND DENSITY OF FIVE SINGLE FAMILY DWELLINGS BUT THE INDIVIDUAL HOMES AND LANDSCAPE DESIGNS WILL BE FINALIZED BY THE FUTURE BUYERS AND WILL BE SUBJECT TO APPEARANCE COMMISSION REVIEWS

MEDINA GARDENS SUBDIVISION LANDSCAPE PLAN

MEDINA GARDENS DEVELOPMENT



DRAWINGS INDEX:

SP.1 - PROPOSED LAND USE

SP.2 - AERIAL VIEW OF DEVELOPMENT

A.1 - 4 UNIT TOWNHOUSE BASEMENT PLAN

A.2 - 4 UNIT TOWNHOUSE FIRST FLOOR PLAN

A.3 - 4 UNIT TOWNHOUSE SECOND FLOOR PLAN

A.4 - 4 UNIT TOWNHOUSE THIRD FLOOR PLAN

A.5 - 4 UNIT TOWNHOUSE FRONT / WEST ELEVATION

A.6 - 4 UNIT TOWNHOUSE GARAGE / EAST ELEVATION

A.7 - 4 UNIT TOWNHOUSE SOUTH & NORTH ELEVATIONS

A.8 - MONUMENT SIGN AND FENCE

R.1 - MATERIALS COLOR PALETTE

R.2 - TOWNHOUSE SIGN VIEWS

R.3 - LINCOLN AVE. TOWNHOUSE VIEWS

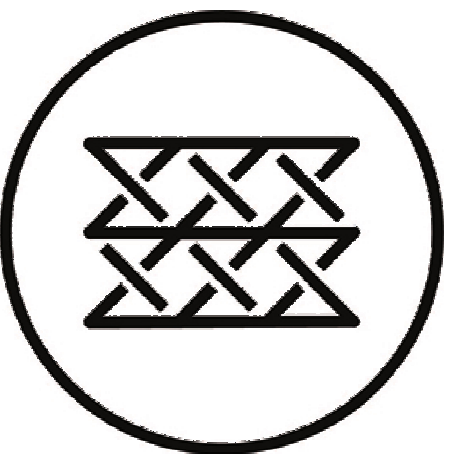
R.4 - TOWNHOUSE FRONT ELEVATION VIEW

R.5 - TOWNHOUSE GARAGE ELEVATION VIEW

R.6 - TOWNHOUSE REAR ELEVATION VIEWS

R.7 - SOUTH LOT PERSPECTIVES

R.8 - SOUTH LOT PERSPECTIVES



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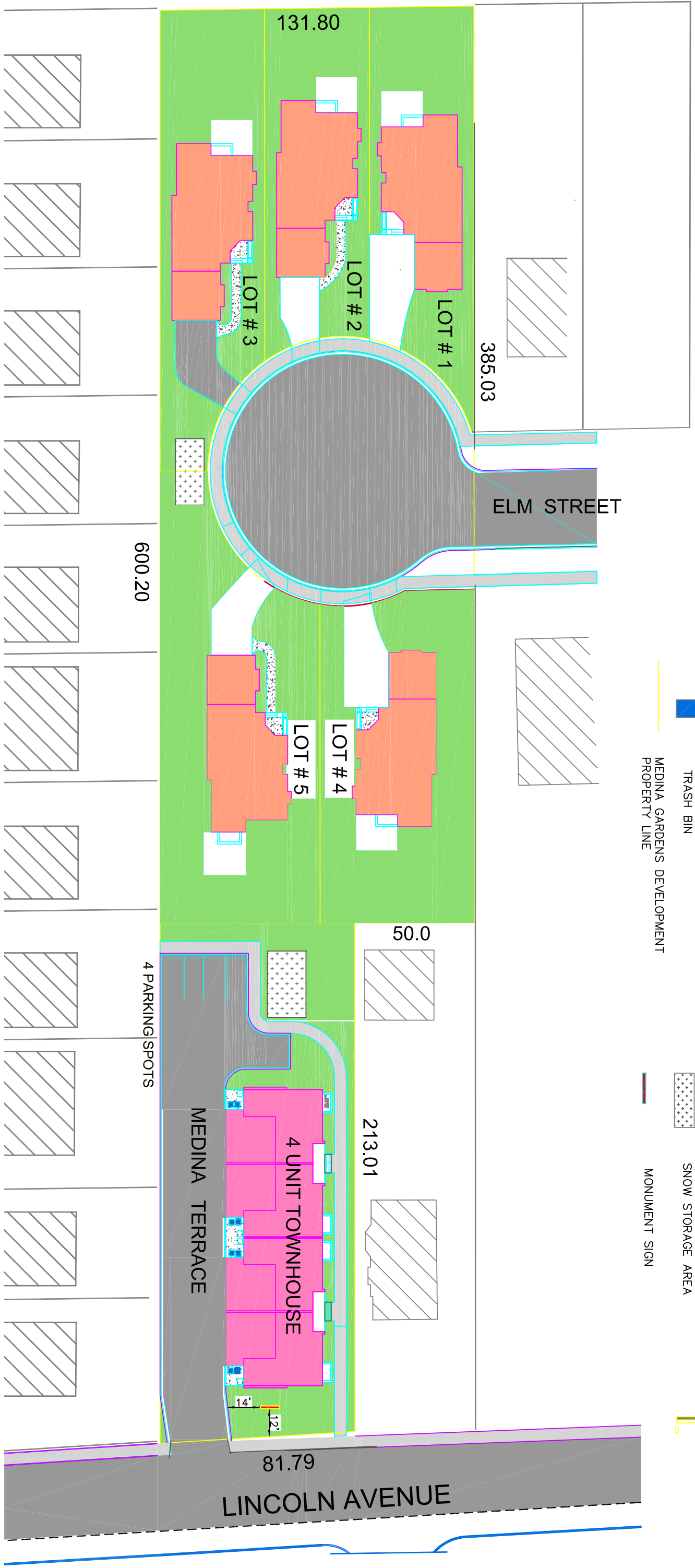
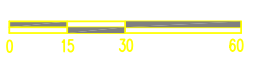
PARK RIDGE IL. 60068

phone: 847 877 6255

bkbuiltdesign@gmail.com

LEGEND

- PROPOSED 4 UNIT TOWNHOUSE
- FUTURE HOUSE BUILDING FOOTPRINT TO BE DETERMINED ONCE LOT IS PURCHASED
- EXISTING NEIGHBORS
- OPEN GREEN AREA
- SNOW STORAGE AREA
- ASPHALT ROAD AND PARKING AREA
- CONCRETE WALK
- TRASH BIN
- MONUMENT SIGN
- MEDINA GARDENS DEVELOPMENT PROPERTY LINE



PROPOSED LAND USE

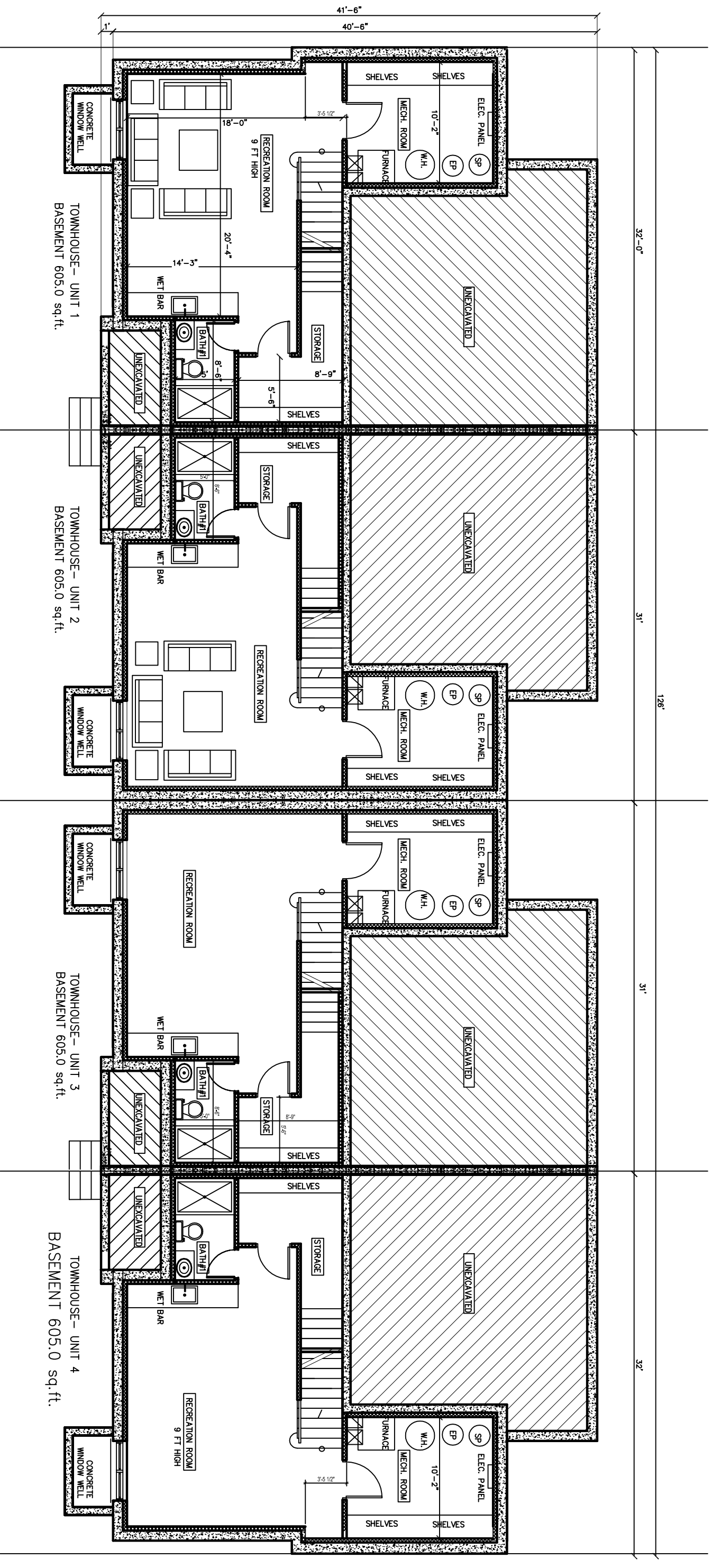
MEDINA GARDENS DEVELOPMENT

SP.1

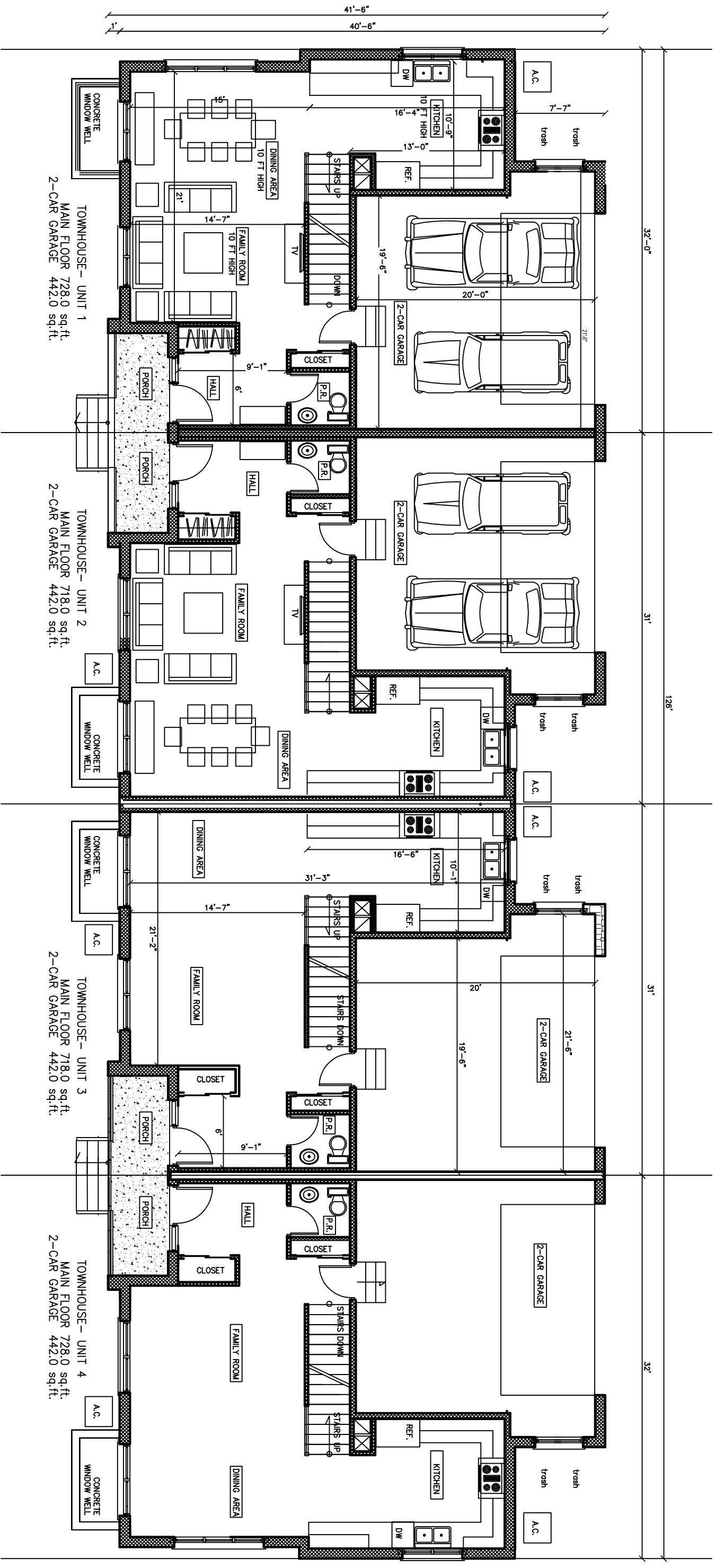


AERIAL VIEW

MEDINA GARDENS DEVELOPMENT **SP-2**



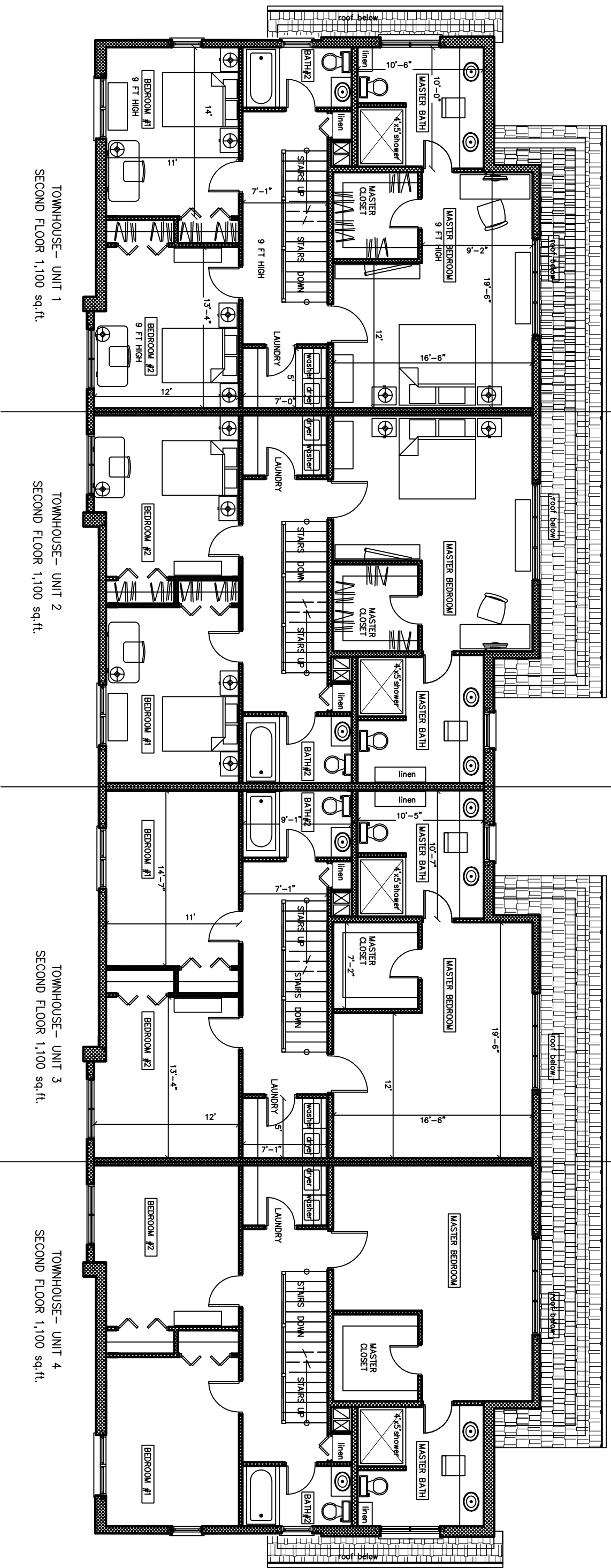
TOWN HOUSE FLOOR PLAN - BASEMENT FLOOR **A.1**
 MEDINA GARDENS DEVELOPMENT



TOTAL FIRST FLOOR - 4,660.0 SQ.FT.

TOWN HOUSE FLOOR PLAN - FIRST FLOOR

A.2



TOWNHOUSE - UNIT 1
SECOND FLOOR 1,100 sq.ft.

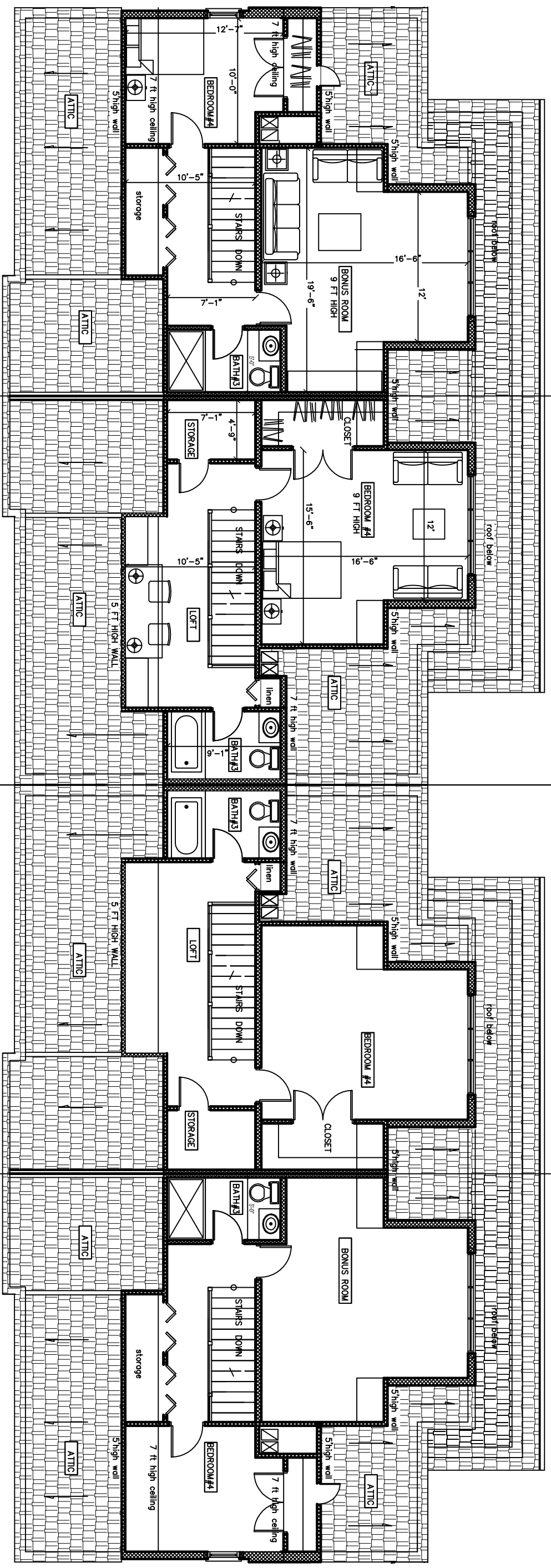
TOWNHOUSE - UNIT 2
SECOND FLOOR 1,100 sq.ft.

TOWNHOUSE - UNIT 3
SECOND FLOOR 1,100 sq.ft.

TOWNHOUSE - UNIT 4
SECOND FLOOR 1,100 sq.ft.

TOTAL SECOND FLOOR - 4,400.0 SQ.FT.

TOWNHOUSE FLOOR PLAN - SECOND FLOOR



TOWNHOUSE - UNIT 1
THIRD FLOOR 600.0 sq.ft.

TOWNHOUSE - UNIT 2
THIRD FLOOR 600.0 sq.ft.

TOWNHOUSE - UNIT 3
THIRD FLOOR 600.0 sq.ft.

TOWNHOUSE - UNIT 4
THIRD FLOOR 600.0 sq.ft.

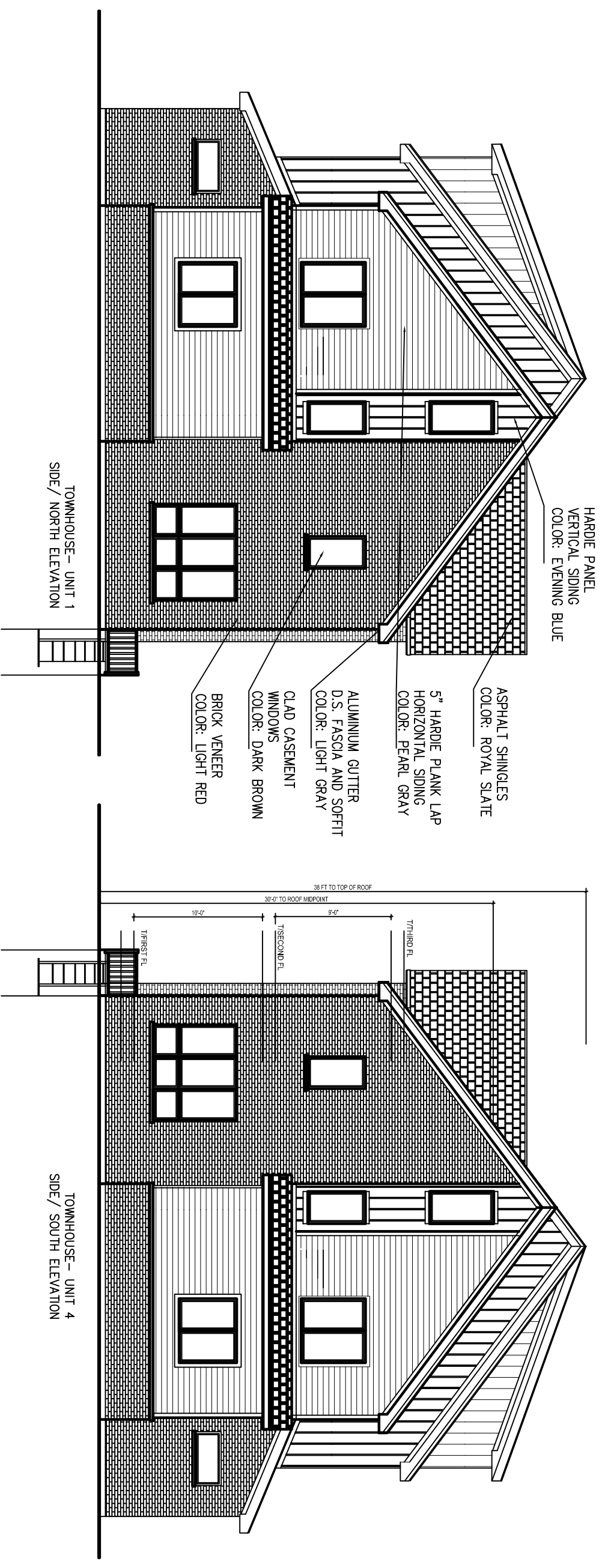
TOTAL THIRD FLOOR - 2,400.0 SQ.FT.

TOWN HOUSE FLOOR PLAN - THIRD FLOOR

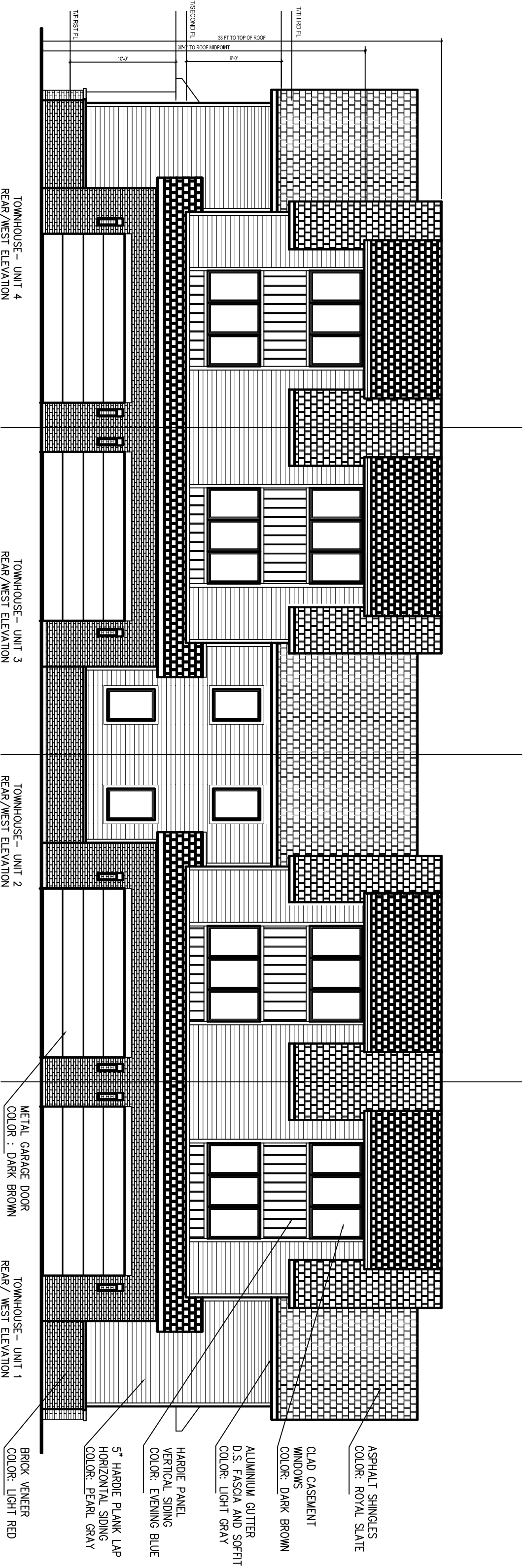
A.4



TOWN HOUSE FRONT/ EAST ELEVATION **A.5**
 MEDINA GARDENS DEVELOPMENT



TOWN HOUSE SIDE NORTH & SOUTH ELEVATIONS **A.6**
 MEDINA GARDENS DEVELOPMENT



TOWNHOUSE - UNIT 4
REAR / WEST ELEVATION

TOWNHOUSE - UNIT 3
REAR / WEST ELEVATION

TOWNHOUSE - UNIT 2
REAR / WEST ELEVATION

TOWNHOUSE - UNIT 1
REAR / WEST ELEVATION

METAL GARAGE DOOR
COLOR : DARK BROWN

BRICK VENEER
COLOR: LIGHT RED

5" HARDIE PLANK LAP
HORIZONTAL SIDING
COLOR: PEARL GRAY

HARDIE PANEL
VERTICAL SIDING
COLOR: EVENING BLUE

ALUMINIUM GUTTER
D.S. FASCIA AND SOFFIT
COLOR: LIGHT GRAY

CLAD CASEMENT
WINDOWS
COLOR: DARK BROWN

ASPHALT SHINGLES
COLOR: ROYAL SLATE

THIRD FL
THIRD FL
THIRD FL
38 FT TO TOP OF ROOF
30'-0" TO ROOF MIDPOINT
9'-0"
10'-0"

TOWN HOUSE GARAGE / WEST ELEVATION

A.7

GUTTERS, FASCIA AND SOFFIT- LIGHT GRAY



ASPHALT SHINGLES-ARCHITECTURAL SERIES ROYAL SLATE



CASEMENT CLADDING WINDOWS- DARK BROWN



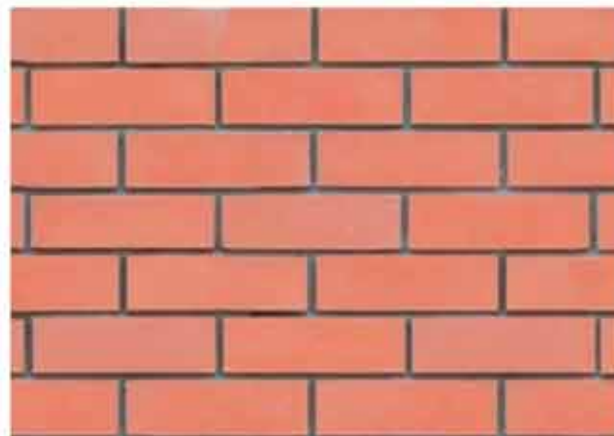
5" HARDIE PLANK LAP HORIZONTAL SIDING - PEARL GRAY



HARDIE PANEL VERTICAL SIDING- EVENING BLUE



4" BRICK VENEER- LIGHT RED





VIEW SOUTHWEST



VIEW SOUTH



VIEW SOUTH EAST





VIEW EAST



VIEW WEST

VIEW NORTH WEST



AERIAL VIEW NORTH



AERIAL VIEW WEST



SOUTH EAST AERIAL



NORTH EAST AERIAL



VIEW WEST



AERIAL EAST VIEW



SOUTH WEST VIEW



NORTH VIEW



SOUTH EAST AERIAL



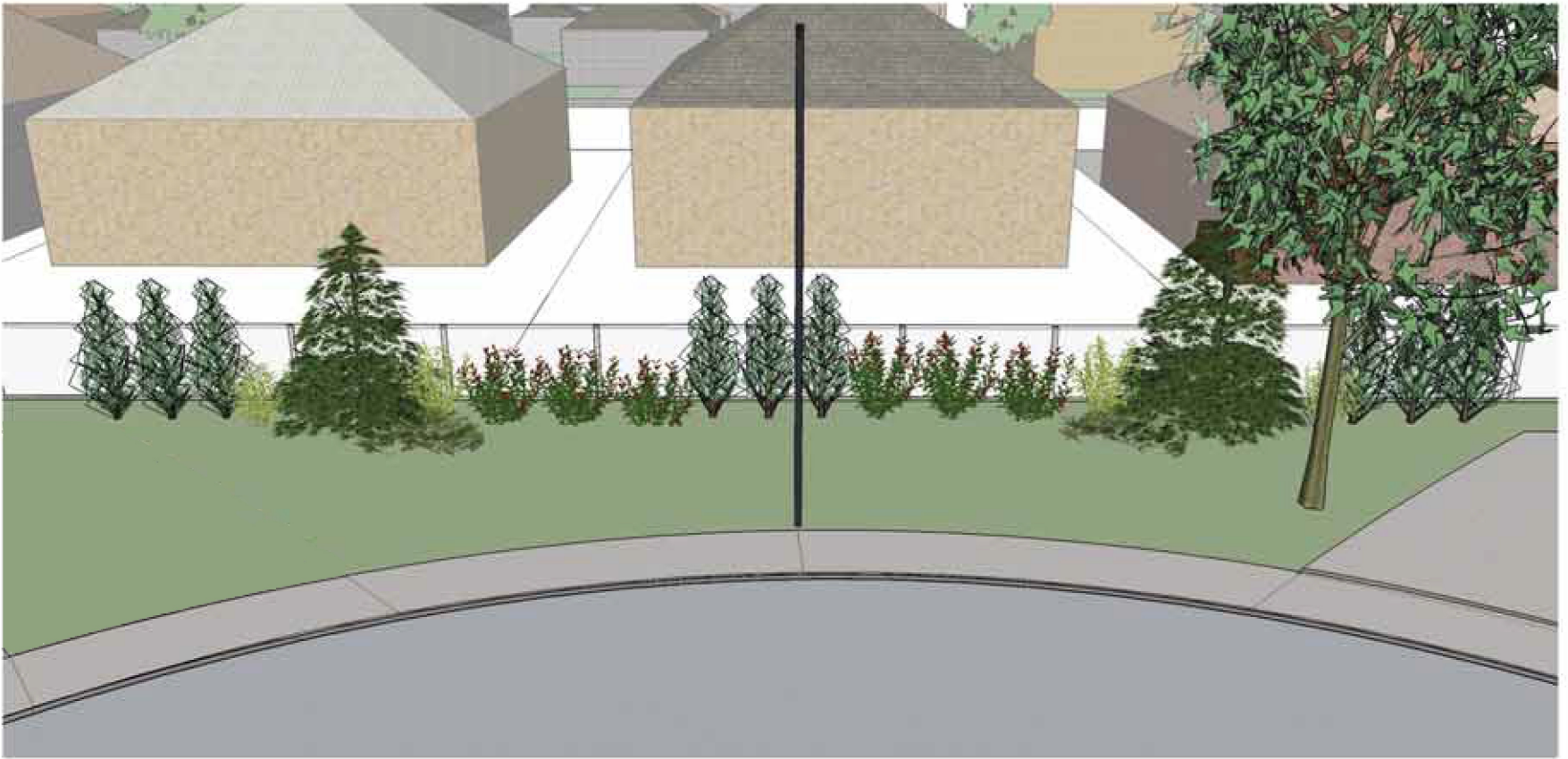
NORTH EAST AERIAL



VIEW WEST



AERIAL EAST VIEW



SOUTH WEST VIEW



NORTH VIEW

