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CAPE COD COMMISSION

Date: January 6, 2011

To: Richard Hayden
Stratford Capital Group
100 Corporate Place
Suite 404
Peabody, MA 01960

From: Cape Cod Commission

Re: Development of Regional Impact Hardship Exemption
Cape Cod Commission Act, Sections 12, 13 and 23

Applicant: Stratford Capital Group
100 Corporate Place
Suite 404
Peabody, MA 01960

Project: Simpkins School Redevelopment

Project #: TR/HDEX 10018

Project Location: 134 Old Main Street, South Yarmouth, MA

Book/Page: Lot 51 Book: 5175 Page: 2399

DECISION OF THE CAPE COD COMMISSION

SUMMARY

The Cape Cod Commission (Commission) hereby approves with conditions, the application of Stratford Capital Group, (the Applicant) represented by Richard Hayden, Executive Vice President, Stratford Capital Group, as a Development of Regional Impact (DRI) Hardship Exemption Project of Community Benefit pursuant to Sections 12, 13 and 23 of the Cape Cod Commission Act (Act), c. 716 of the Acts of 1989, as amended, for the renovation of an existing 1930 school building and the addition of 39,366 square feet (in a 14,000 square foot footprint) to the rear of the existing building and associated site improvements, located at 134 Old Main Street, South Yarmouth, MA. This decision is rendered pursuant to a unanimous vote of the Commission on January 6, 2011.

CAPE COD COMMISSION TWENTY YEARS 1990-2010
Keeping a Special Place Special

PROJECT DESCRIPTION

The Town currently owns the site, but was not a co-Applicant in the Commission's review. The project consists of the renovation of a 1930 three-story brick building with two-story wood buildings at the ends of the main building, encompassing 41,834 square feet. The structure is a National Register site located within the South Yarmouth/Bass River National Register Historic District. The project will also add 39,366 square feet (in a 14,000 square foot footprint) to the rear of the existing building. It will add new parking spaces on the north side of the property, upgrade the site drainage and install a new on-site septic system. The Applicant has also agreed to provide a new parking lot as part of the project, to be dedicated to the Town-owned athletic fields at no cost to Yarmouth. The renovation will result in an 81,200 square foot building, and creates sixty-five (65) 100% affordable rental units for households age 55 and over.

PROCEDURAL HISTORY

The Commission received a referral of the project as a DRI on June 29, 2010 from the Town of Yarmouth Building Commissioner. The Commission received the DRI Hardship Exemption (HDEX)/Project of Community Benefit (POCB) application on August 27, 2010. The DRI/HDEX/POCB application was deemed substantively complete to proceed to a public hearing on November 1, 2010.

In accordance with the Cape Cod Commission Act, the DRI hearing period was opened by Hearing Officer on August 27, 2010. The HDEX/POCB hearing was opened by a duly noticed public hearing held on November 18, 2010 at the Senior Center in Yarmouth, MA. At this hearing, the Subcommittee voted to continue the public hearing to 10:00 AM on November 23, 2010 at the Commission's office in Barnstable, MA where the hearing was closed by a Hearing Officer.

The Subcommittee held a Subcommittee meeting on December 6, 2010 beginning at 2:00 PM at the Commission's office in Barnstable MA. At this Subcommittee meeting, the Subcommittee deliberated on the project. The Subcommittee voted to find that a hardship exists, financial or otherwise, to modify the application of MPS TR0.2 to allow a traffic credit from prior use as school, and to grant relief from MPS TR3.1 Level of Service analysis at the driveway, from MPS E1.1 Redevelopment Energy Audit for the existing building, from MPS E1.4 *Building Envelope* requirement for the existing building, and from MPS AH1.10 ENERGY STAR *Building Envelope* requirements for the existing building.

The Subcommittee voted to find that relief may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act. The Subcommittee found that the relief granted was the minimum relief necessary to address the hardship and related directly to the nature of the hardship.

The Subcommittee voted to find that the project is eligible for designation as a Project of Community Benefit as it confers upon or results in distinct benefits to the community and citizens of Barnstable County consistent with Sections 1(a) and 1(c) of the Act by development of an adequate supply of fair affordable housing and the project's preservation of historical, cultural, archaeological, architectural and recreational values.

The Subcommittee found the project was consistent with Yarmouth's Local Comprehensive Plan, and could be conditioned to be consistent with local zoning.

The Subcommittee found the project could be found consistent with the RPP with appropriate conditions and relief granted.

The Subcommittee found the project's probable benefits outweighed its probable detriments. The Subcommittee found the project's benefits included meeting the intent of Best Development Practice (BDP) LU1.4, and meeting WR5.6 and BDP AH1.16, by creating a significant amount of affordable and visit-able units, the preservation of a historic structure, and by putting the development back onto Yarmouth's tax rolls.

The Subcommittee voted to approve the Hardship Exemption request for the Simpkins School project as a project of Community Benefit and directed Commission staff to draft a written approval decision with conditions for the Subcommittee's review.

The Subcommittee voted to allow staff to notice the draft written decision for review by the full Commission meeting on January 6, 2011.

A second Subcommittee meeting was held on December 20, 2010 where the Subcommittee reviewed the draft decision and unanimously approved the revised draft Hardship Exemption/Project of Community Benefit decision for the Simpkins School redevelopment project. The Subcommittee found the project's benefits also included meeting BDP LU1.3 and the intent of BDP LU1.4. The Subcommittee voted unanimously to recommend that the full Commission approve the draft Hardship Exemption/Project of Community Benefit decision for the Simpkins School redevelopment project.

A final public hearing was held before the full Cape Cod Commission on January 6, 2011. At the close of this hearing, the Commission voted unanimously to approve the project as a DRI Hardship Exemption/Project of Community Benefit, subject to conditions.

MATERIALS SUBMITTED FOR THE RECORD

In addition to the list of materials submitted for the record (see Table 1 below), the application and notices of public hearings relative thereto, Commission staff's notes and correspondence, the minutes of public meetings and hearings, and all other written submissions received in the course of the proceedings are hereby incorporated into the record by reference.

TABLE 1: Materials Submitted for the Record

Materials from Cape Cod Commission	***Date Sent***
Letter from Marianna Sarkisyan to Richard Hayden (RH) re: Referral of project to Commission	6/30/10
Letter from Gail Hanley (GH) to RH re: Cost to notice hearing	8/4/10
Email from Kristy Senatori (KS) to RH re: Application submission	8/23/10
Email from KS to RH re: Town as possible co-applicant	8/23/10
Email from KS to RH re: Copies of Application to Town	8/30/10
Email from KS to RH re: Town as possible co-applicant	8/30/10
Email from Andrea Adams (AA) to RH re: Cost to notice hearings	9/2/10
Email from KS to RH re: Executive Committee meeting and fee waiver	9/8/10
Letter from AA to RH re: Application is not complete	9/9/10
Email from AA to RH re: Application is not complete	9/9/10
Letter from AA to RH re: Application is not complete	9/30/10
Email from AA to RH re: Application is not complete	9/30/10
Email from Paul Ruchinskas (PR) to RH re: Affordable Housing issues	10/21/10

Email from AA to RH re: Hearing	10/25/10
Email from PR to RH re: Affordable Housing and Energy issues	10/28/10
Email from KS to RH re: Project of Community Benefit definition	10/29/10
Letter from GH to RH re: Cost to notice hearing	11/1/10
Email from AA to RH re: Application is complete	11/1/10
Letter from AA to RH re: Application is complete	11/1/10
Email from AA to Karen Greene, Yarmouth's Director of Community Development (KG) re: Project's conformance with local bylaws, LCP, etc	11/3/10
Email from AA to Commission Members re: Selection to serve on Subcommittee for project review	11/4/10
Email from AA to Terry Sylvia, Yarmouth's Town Planner (TS), re: Project's conformance with local bylaws, LCP, etc	11/5/10
Email from AA to TS re: Project's conformance with local bylaws, LCP	11/5/10
Email from AA to a Ms. Harrity re: Response to her telephone inquiry about the project	11/8/10
Email from AA to RH and KG re: Copy of staff report	11/10/10
Staff report (Mailed to Subcommittee on 11/10/10)	11/10/10
Staff report cover Memo from AA to Subcommittee	11/10/10
Copy of staff Power Point used at Public Hearing on 11/18/10	11/18/10
Minutes from 11/18/10 Public Hearing (Distributed to Subcommittee on 12/6/10)	11/18/10
Email from AA to RH and KG re: Hearing Officer on 11/23/10	11/19/10
Email from AA to RH re: Additional information from Applicant	11/20/10
Email from AA to RH re: Additional information from Applicant	11/29/10
Email from AA to KG re: Question at Hearing on Fire Dept. access	11/30/10
Email from AA to Subcommittee re: Meeting on 12/6/10	12/1/10
Email from AA to RH and KG re: Subcommittee meeting on 12/6/10	12/1/10
Email from AA to RH and KG re: Comment letter received at Hearing	12/2/10
Email from AA to RH re: Applicant's Memo clarifying information	12/2/10
Minutes from 12/6/10 Subcommittee Meeting (Distributed to Subcommittee on 12/15/10)	12/6/10
Email from AA to Mary Wagan, Town of Yarmouth, concerning mailing of final Commission decision	12/15/10
Memo from AA to Subcommittee, draft decision, Minutes	12/15/10
Draft decision	12/15/10
Minutes from 12/20/10 Subcommittee Meeting (Distributed to Subcommittee as part of 1/6/11 mailing)	12/20/10
Cover Memo, from AA to Commission Members, draft decision and materials from the record	12/28/10
Cover Memo, from AA to Subcommittee, draft decision and Minutes	12/28/10
Email from AA to RH re: Copies of final plans for inclusion in decision	12/28/10
Materials from Applicant	***Date Received***
Site Plan set (for DHCD)	2/25/10
Site Plan set	4/7/10
Email from RH to KS re: Should Town be co-applicant	8/24/10
Email from RH to KS re: Copies of materials to Town	8/30/10
Email from RH to KS re: Benefits of Town as co-applicant	8/30/10

DRI/Hardship Exemption application with supporting materials, including a copy of the application on CD	8/30/10
Email from RH to AA re: No adverse effect letter from MHC	9/1/10
Email from RH to AA re: Fee waiver request with attachments	9/1/10
Email from RH to AA re: Paying cost to notice hearings	9/3/10
Email from RH to KS re: Attendance at Executive Committee for fee waiver	9/8/10
Email from RH to AA re: Additional application information	9/9/10
Email from Donald Rose, Coler & Colantonio (DR) to AA re: Additional application information	9/17/10
Email from DR to AA re: Revised site plan	9/17/10
Letter from DR to AA re: Hard copy of additional application information sent by E-mail	9/17/10
Email from DR to AA re: Additional application information	10/7/10
Letter from DR to AA re: Hard copy of additional application information sent by E-mail	10/13/10
Email from Michael Gardenier, ICON Architecture (MG) to AA re: Additional application information	10/27/10
Email from MG to AA re: Revised Memo	10/29/10
Email from RH to KS re: Project of Community Benefit designation	10/29/10
Cover letter from RH to Commission members re: Applicant's materials	11/9/10
From RH, Memo and attachments in response to Commission staff report	11/17/10
Copy of Applicant's Power Point received at 11/18/10 Hearing	11/18/10
Email from RH to AA and KG re: Applicant's project team members	11/19/10
Email from RH to AA re: Memo clarifying issues discussed at Hearing	11/19/10
Email from RH to AA re: Memo clarifying issues discussed at Hearing	12/2/10
Materials from Public Agencies/Towns/State/Federal	***Date Received***
DRI Referral Form from Mr. Brandolini, with attachments	6/29/10
Email from Mary Wagan to AA re: Application received	8/30/10
Email from Elizabeth Hartsgrove to AA re: Letter of support from Town Administrator	9/8/10
Letter of support from Town Administrator	9/13/10
Municipal Endorsement Resolution from Board of Selectmen	10/5/10
Email from KG to AA re: Copy of staff report	10/25/10
Email from TS to AA re: Project's conformance to local bylaws, LCP	11/4/10
Email from TS to AA re: Project's conformance to local bylaws, LCP	11/5/10
Email from KG to AA re: Question asked at Hearing on Fire access	11/30/10
Letter from Yarmouth Fire Department	12/6/10
Email from Mary Wagan, Town of Yarmouth, Questions concerning mailing of final Commission decision	12/15/10
Materials from General Public	***Date Received***
Letter from Tierneys	11/18/10

TESTIMONY

November 18, 2010 Public Hearing

A public hearing was held at 6:00 PM on November 18, 2010 in the Senior Center in Yarmouth, MA.

Ms. Andrea Adams presented the staff report and gave a brief overview of the existing site setting and proposed project, the Cape Cod Commission's jurisdiction, the procedural history, Commission staff analysis, and conclusions. Ms. Adams said the Applicant is requesting the Subcommittee modify application of MPS TR0.2 to allow traffic credit from prior use as school. She said the Applicant is also requesting relief from MPS TR3.1 Level of Service analysis at the site driveway, from MPS E1.4 *Building Envelope* requirement for the existing building and relief from MPS AH1.10 ENERGY STAR construction standard requirements for the existing building. Ms. Adams said the Subcommittee could adjust application of MPS TR0.2 and waive the other MPS requirements if they find the Applicant has met the burden of proving a hardship exists (financial or otherwise) and if desirable relief may be granted without nullifying or substantially derogating from the intent or purpose of the Act.

Ms. Senatori noted the Applicant would also need relief from MPS E1.1 Redevelopment Energy Audit for the existing building.

Mr. Hayden Executive Vice President of Stratford Capital Group introduced himself and a provided a PowerPoint presentation about the company and the project. Mr. Hayden described the Stratford Group. He provided an overview of some previous projects completed by the company that involved rehabilitations, renovations and/or additions to historic school buildings into housing or affordable housing. He described the current project as a 65-unit rental property for seniors (over 55), 100% affordable in perpetuity. He stressed that it was the adaptive reuse and rehabilitation of the existing historic school.

Ms. Janis Mamayek, ICON Architecture, introduced herself and used prior developments and renovations completed by Stratford to demonstrate the benefits of the project and examples of the project's potential interior configuration upon completion. Ms. Mamayek stated that Stratford Group uses a historic preservation consultant in order to comply with renovation procedures.

Mr. Michael Gardenier, ICON Architecture, then provided an overview of the Simpkins School's architecture and showed the site plans for the new addition. He discussed the historic front lawn and landscape and the importance of the 36' caliber trees that make the front yard historic. He described the placement of parking for tenants and the adjacent Town athletic fields. He described handicap accessibility and energy standards. Mr. Gardenier described how the existing classrooms would be converted into units and the gym will be converted into four one-bedroom loft units.

Mr. Kelly Killeen, Site Engineer, Coler & Colantonio, discussed the layout of the project. He described how the existing ball field would be relocated with access maintained off of old Main Street. He noted the new parking lot will provide 1-½ spaces for every 1 unit, and that additional parking would be offered to service the athletic fields and they are proposing grass pavers for the athletic field parking areas. He described the proposed new stormwater management systems. He said the project would produce approximately 9,750 gallons/day of wastewater and use an advanced nitrogen removal system.

Mr. McCormack asked staff about additional materials received from the Applicant on November 17, 2010. Ms. Adams said that staff reviewed it and it did not change any of their recommendations.

Mr. Knight asked about the time frame of the project and if it depended on tax credits. Mr. Hayden responded that he has always been able to get financing for prior projects and he is confident in this case. Mr. Hayden estimated that construction would begin in the summer or fall of 2011.

Mr. Blanton asked if the process would take about 11-14 months to complete and Mr. Hayden replied that he believes it would take about 14 months.

Mr. Knight asked about traffic mitigation and what the Town's role in that would be. Ms. Adams replied that the basis for the estimated figure of $500,000 for traffic mitigation is what the proposed use would generate. She noted the Town has articulated support for the project and supports a Hardship Exemption.

Mr. Olsen asked how the project would be staffed and Mr. Hayden replied that the company would put the project out to bid for all contractors and the general contractor will likely hire local subcontractors because they wouldn't want people have to commute during the winter, and people who work on the property will be from the Cape.

Mr. Virgilio asked about fire access. Ms. Adams responded that staff has not received correspondence from the Town specifically on this subject but noted that there will be circular fire access and this issue will also be looked at in the local level of review.

Mr. Virgilio commented that the project seems like it will generate less traffic than the previous use. Mr. Hayden responded that because there is a three-year look back period in the RPP, they had to use a generation rate from the Institute of Traffic Engineer's (ITE) Manual without a credit for the school as the previous use. He also noted the ITE figures use *apartments*, not senior apartments and the increase is on a daily basis. Mr. Hayden suggested that if the traffic generation was further analyzed, there is a difference because the residents will not be leaving during peak rush hour.

Mr. Virgilio asked Mr. Ruchinskas if the project complies with the RPP Affordable Housing requirements, and Mr. Ruchinskas replied yes. He also noted the project addressed a priority regional housing need because it would provide affordable rental housing.

Ms. Suzanne McAuliffe, Yarmouth Selectmen, noted that the school was decommissioned about five years ago and that a recommendation was made to Town Meeting to convert the building into senior affordable housing units. She said the Stratford Group was the only company to apply to the Town's Request for Proposals (RFP) for a reuse, and the Town fully supports the project, and it is consistent with prior Town Meeting votes. Ms. McAuliffe stated that she does not believe that there will be a traffic issue and suggested that the Town's process took longer than three years, and in some sense inadvertently contributed to the project being ineligible for credits from the prior use as a school because the RFP process took longer than three years to complete.

The Subcommittee heard comments and questions from members of the public.

The Subcommittee continued the hearing to November 23, 2010 at 10:00 AM at the Commission's office where it would be closed by Hearing Officer.

The Subcommittee voted to hold a Subcommittee meeting on December 6, 2010 at 2:00 PM at the Commission's office in Barnstable, MA to deliberate on the project.

November 23, 2010 Public Hearing
At 10:00 AM on 11/23/10, a Commission staff Hearing Officer closed the public hearing on the project. No presentations were made and no testimony was taken.

December 6, 2010 Subcommittee Meeting
A Subcommittee meeting was held on December 6, 2010 at 2:00 PM at the Commission's office. The Subcommittee deliberated on whether the Applicant has met the burden of proving that a hardship exists, financial or otherwise, and whether granting relief from certain RPP standards presents a substantial detriment to the public good or nullifies or substantially derogates from the intent or purpose of the Cape Cod Commission Act.

The Subcommittee voted to find that a hardship exists, financial or otherwise, and to modify the application of MPS TR0.2 to allow a traffic credit from prior use as school, and to grant relief from MPS TR3.1 Level of Service analysis at the driveway, from MPS E1.1 Redevelopment Energy Audit for the existing building, from MPS E1.4 *Building Envelope* requirement for the existing building, and from MPS AH1.10 ENERGY STAR *Building Envelope* requirements for the existing building.

The Subcommittee voted to find that the project is eligible for designation as a Project of Community Benefit as it confers upon or results in distinct benefits to the community and citizens of Barnstable County consistent with Sections 1(a) and 1(c) of the Act by development of an adequate supply of fair affordable housing and the project's preservation of historical, cultural, archaeological, architectural and recreational values.

The Subcommittee voted to find the project was consistent with Yarmouth's Local Comprehensive Plan, and could be conditioned to be consistent with local zoning. The Subcommittee voted to find the project could be found consistent with the RPP with appropriate conditions and relief granted.

The Subcommittee voted to find that relief may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act. The Subcommittee found that the relief granted was the minimum relief necessary to address the hardship and related directly to the nature of the hardship.

The Subcommittee voted to find that the project is eligible for designation as a Project of Community Benefit as it confers upon or results in distinct benefits to the community and citizens of Barnstable County consistent with Sections 1(a) and 1(c) of the Act by development of an adequate supply of fair affordable housing and the project's preservation of historical, cultural, archaeological, architectural and recreational values.

The Subcommittee found the project's probable benefits outweighed its probable detriments. The Subcommittee found the project's benefits included meeting BDP WR5.6 and BDP AH1.16, creating a significant amount of affordable and visit-able units, the preservation of a historic structure, and putting the development back onto Yarmouth's tax rolls.

The Subcommittee voted to approve the Hardship Exemption request for the Simpkins School project as a project of Community Benefit and directed Commission staff to draft a written approval decision with conditions for the Subcommittee's review.

The Subcommittee voted to allow staff to notice the draft written decision for review by the full Commission meeting on January 6, 2011.

The Subcommittee's consensus was that the Commission's decision should acknowledge that the Applicant would strive to provide some type of accommodation for the ospreys that had a nest on top of the existing building.

December 20, 2010 Subcommittee Meeting
A Subcommittee meeting was held on December 20, 2010 beginning at 2:00 PM at the Commission's office. The Subcommittee approved the Minutes from the 11/18/10 public hearing and 12/6/10 Subcommittee meeting. The Subcommittee reviewed a revised draft written Hardship Exemption Project of Community Benefit decision page by page. The Subcommittee, Applicant's representative, Mr. Richard Hayden of Stratford Capital Group, and Commission staff discussed the draft decision. The Subcommittee found that the project's benefits included meeting BDP LU1.3 and the meeting the intent of BDP LU1.4. The Subcommittee amended Affordable Housing condition AHC7 to read in part *"certifies that any occupants of the units..."* The Subcommittee unanimously voted to approve the revised draft Hardship Exemption/Project of Community Benefit decision for the Simpkins School redevelopment project. The Subcommittee unanimously voted to recommend that the full Commission approve the draft Hardship Exemption/Project of Community Benefit decision for the Simpkins School redevelopment project.

JURISDICTION

The project, as described in the Applicant's application materials, qualifies as a DRI pursuant to Section 3(g) of the Commission's *Enabling Regulations* (revised May 2010, corrected June 2, 2010) as *any proposed development, including the expansion of existing developments, that is planned to create or add 30 or more Residential Dwelling Units.*

FINDINGS

The Commission has considered the DRI/Hardship Exemption/Project of Community Benefit application of Stratford Capital Group for the proposed redevelopment of the Simpkins School and based on consideration of such application and upon the information presented at the public hearings and submitted for the record, makes the following findings, pursuant to Sections 12, 13 and 23 of the Act:

General Findings

GF1. As the date of the first substantive public hearing was November 18, 2010, this project was reviewed subject to the 2009 Regional Policy Plan (RPP), as amended in May 2010 and effective June 2010.

GF2. As of the date of this decision, the Town of Yarmouth did not have a Local Comprehensive Plan (LCP). The project, as proposed, is nevertheless consistent with Yarmouth's LCP as confirmed by written testimony received on November 4, 2010 and November 5, 2010 from Terry Sylvia, Yarmouth Town Planner, which was considered by the Subcommittee at the November 18, 2010 public hearing. The Commission adopts the written testimony of Mr. Sylvia and finds the development is consistent with Yarmouth's LCP.

GF3. As provided in written testimony dated November 4, 2010 and November 5, 2010 from Terry Sylvia, which was considered by the Subcommittee at the public hearing on November 18, 2010, Zoning Board of Appeals (ZBA) action will be needed to allow the proposed multi-family use in a residential zone. The Commission adopts the written testimony of Mr. Sylvia and finds that upon approval of the development by the ZBA, that the development is consistent with local zoning and development bylaws.

GF4. As the project is not located in a District of Critical Planning Concern, the Commission finds that the project can be considered to be consistent with this criterion.

GF5. The Commission finds that the probable benefits of the project outweigh the probable detriments of the proposed project. The project's benefits include meeting BDP LU1.3, meeting the intent of BDP LU1.4, and by meeting BDP WR5.6 by the submission of a Phase I Environmental Site Assessment, meeting BDP AH1.16, which establishes a priority for affordable rentals, by creating a significant amount of affordable and visit-able units, through preserving a significant historic structure and by returning this building to Yarmouth's tax rolls.

GF6. The Commission finds that the proposed project qualifies for designation as a Hardship Exemption Project of Community Benefit in that the project confers upon or result in distinct benefits to the community and citizens of Barnstable County consistent with Sections 1(a) and 1(c) of the Act as *development of an adequate supply of fair affordable housing* and by *preservation of historical, cultural, archaeological, architectural and recreational values.* The Commission also finds because the project is the renovation of and an addition to a historically significant building that is listed as a contributing structure to the South Yarmouth/Bass River National Register Historic District into 65 new 100% affordable housing units, that full compliance with Minimum Performance Standards TR0.2, TR3.1, the *Building Envelope* portion of MPS E1.4 for the existing building, and the *Building Envelope* portion of MPS AH1.10 for the existing building would constitute a financial hardship by adding an estimated $500,000 to $1,000,000 to project costs, and would diminish these two community benefits to be conferred to Yarmouth by potentially making the project financially infeasible.

GF7. The proposed project consists of the renovation of the interior of a 1930 school building and adding 39,366 square feet (in a 14,000 square foot footprint) to the rear of the existing building. The project will also add new parking spaces on the north side of the property, upgrade the site drainage and install a new on-site septic system. The Applicant has also agreed to provide a new parking lot as part of the project, to be dedicated to the Town-owned athletic fields at no cost to Yarmouth. The renovation will result in an 81,200 square foot building, and creates sixty-five (65) 100% affordable rental units for households age 55 and over.

GF8. The Applicant received a letter of support from Yarmouth's Town Administrator dated September 7, 2010. The Applicant received a resolution of the Yarmouth Board of Selectmen in support of the project dated October 5, 2010.

GF9. The Commission finds that a hardship exists, financial or otherwise, and to modify the application of MPS TR0.2 to allow a traffic credit from prior use as school, and to

grant relief from MPS TR3.1 Level of Service analysis at the driveway, from MPS E1.1 Redevelopment Energy Audit for the existing building, from MPS E1.4 *Building Envelope* requirement for the existing building, and from MPS AH1.10 ENERGY STAR *Building Envelope* requirements for the existing building is appropriate, and may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act. The Commission also finds that the relief granted relates directly to the nature of the hardship and is the minimum necessary to address the hardship.

GF10. The Commission acknowledges the Applicant willingness to incorporate into the project an accommodation for the existing osprey nest that, at the time of this decision, was located on top of the existing building.

GF11. The project will be constructed in accordance with the following plans (attached to this decision as Exhibit A and incorporated by reference):

Simpkins School Residences Permitting Plans, Drawings by Coler & Colantonio, Inc., and ICON Architecture, Received by Commission 8/30/10, Drawings include:

Cover Sheet
Existing Conditions Plans dated 4/16/10, (2 Sheets)
Erosion Control Plans dated 8/25/10, (C-102 and C-103)
Demolition Plans, dated 8/25/10, (C-104 and C-105)
Layout Plans, dated 8/25/10, (C-201 and C-202)
Grading and Utility Plan, dated 8/25/10, (C-203 and C-204)
Site Details Plan, dated 8/25/10 (C-300, C-301, C-302, C-303)
Site General Notes, dated 8/25/10 (C-304)
Lower Level Plan, dated 8/30/10 (A-101)
Ground Level Plan, dated 8/30/10 (A-102)
Intermediate Level Plan, dated 8/30/10 (A-103)
Upper Level Plan, dated 8/30/10 (A-104)
Roof Plan, dated 8/30/10 (A-105)
Building Elevations, dated 8/30/10 (A-201 and A-202)

Simpkins School Residences, Drawing by Coler & Colantonio, Inc. and ICON Architecture, Received by Commission 9/17/10, *Overall Layout Plan*, dated 9/17/10, C-200

Simpkins School Residences, Drawing by Coler & Colantonio, Inc. and ICON Architecture, Received by Commission October 13, 2010, *Layout Plans* dated 825/10, C-201 and C-2002, No revision date is shown on these plans, but they were revised to show landscape plant key

Land Use

LUF1. MPS LU1.1 *(Development Location)* requires in part that *development and redevelopment shall be consistent with the category of desired land use where the project is located as well as the characteristics of that category, both as identified on the Regional Land Use Vision Map.* The site on which the school sits has been designated as *Resource Protection Area* (RPA) for Historic Resources on Yarmouth's part of the Regional Land Use Vision Map. The RPP defines an RPA as *[a]reas designated on the Regional Land Use Vision Map that warrant protection and*

where additional growth is not desired due to the presence of one or more sensitive resources that can include historic districts. Given that the building is National Register structure in the South Yarmouth/Bass River National Register Historic District, and is being redeveloped in a manner that is sensitive to the building's historic significance, the Commission finds the project is consistent with MPS LU1.1.

LUF2. Best Development Practice (BDP) LU1.3 *(Redevelopment/Reuse)* encourages DRIs to reuse existing developed locations in appropriate areas. Given that the Simpkins project is the redevelopment of an existing building and site into another use in a manner consistent with its historic significance, the Commission finds that the project is consistent with BDP LU1.3 and that this is a project benefit.

LUF3. BDP LU1.4 states that *DRIs within Economic Centers or Villages as identified on the Regional Land Use Vision Map involving an historic structure are encouraged to include its rehabilitation and reuse in accordance with federal standards for treatment of historic properties.* The area in which the Simpkins School is located is identified as a *Resource Protection Area* on the Regional Land Use Vision Map. The building is on the National Register, and the site is within the Old South Yarmouth village area. In addition, the renovation will be done in accordance with Federal standards for treatment of historic properties. As such, the Commission finds the proposed project is consistent with the intent of BDP LU1.4, and that this is a project benefit.

LUF4. Because the project is the redevelopment of an existing school building into a residential project, the Commission finds that MPS LU1.2 relating to compact development for nonresidential projects, BDP LU1.5 (*Location of Municipal Offices*), and MPS or Best Development Practices in section LU2 (*Capital Infrastructure and Telecommunications Facilities*) and LU3 (*Rural Lands*) do not apply to this project.

Economic Development

EDF1. According to the Regional Land Use Vision Map for Yarmouth, the project is not located in an Economic Center or a Village Center and does not therefore comply with MPS ED1.1 (*Location in Economic Centers*). The Commission may waive MPS ED1.1 if an Applicant can demonstrate that the development meets certain criteria under MPS ED1.3 (*Waiver*). As a redevelopment project, this project must meet two (2) of the nine (9) waiver criteria listed by MPS ED1.3.

EDF2. The Applicant has provided a resolution of the Yarmouth Board of Selectmen received by the Commission on October 5, 2010 that meets the *Municipal Endorsement* waiver criterion of MPS ED1.3. The project also meets the *Preservation* waiver criterion of MPS ED1.3 because it will be reviewed at the State level for consistency with the Secretary of the Interior's Standards for Treatment of Historic Property. See the findings and conditions in the Heritage Preservation/Community Character section of this decision, below.

EDF3. The Commission finds MPS ED1.4 (*Resource-based Economic Areas)* as well as Minimum Performance Standards in sections ED2 (*Gaming*) and ED4 (*Infrastructure Capacity*) are not applicable to this project.

Water Resources

WRF1. The project is a redevelopment project located within both a Marine Water Recharge Area to the Bass River as well as an Impaired Area classified as a Water Quality Improvement Area. The project will be served by municipal drinking water and an advanced de-nitrification septic system.

WRF2. The proposed redevelopment will generate approximately 9,750 gallons per day (GPD) of wastewater, which is greater than that from existing conditions (3,150 GPD). However, the Commission finds that wastewater from the redeveloped site will be treated with an *Amphidrome* advanced onsite denitrifying septic system, discharging to the Bass River watershed. The Amphidrome system will reduce the nitrogen effluent concentration from 35 ppm to 19 ppm, with improved wastewater treatment; nitrogen loading from the redevelopment will be reduced to less than 10 ppm. The project demonstrates that nitrogen loading from redevelopment will be less than the former school use, and the Commission finds the redevelopment meets MPS WR1.1 for General Aquifer Protection and for Wellhead Protection by application of MPS WR3.2 *(Maintenance of Improvement of Nitrogen Loading)*, the alternate standard for water quality improvement.

WRF3. Hydrologic information submitted by the Applicant demonstrates that current groundwater flow is in a southeast direction, towards the Bass River. With the addition of wastewater discharging from the *Amphidrome* system, groundwater will mound slightly (0.41 feet) underneath the disposal beds, but the direction of groundwater flow will remain essentially unchanged. Adjusting for seasonal variation in groundwater elevation, the Commission finds that the Applicant has demonstrated there is adequate separation to groundwater to effectively discharge wastewater from the proposed new on-site treatment system.

WRF4. The project has completed and submitted for the Commission's files a Phase I Environmental Site Assessment, with two Recognized Environmental Conditions (RECs) relating to a spill that occurred during replacement of an underground fuel storage tank, and an incident of unauthorized dumping. The Applicant's consultant recommended that the 10,000 underground storage tank should be removed and that soils and groundwater in the area should be inspected for evidence of any further releases of petroleum. Records were incomplete regarding the unauthorized dumping incident. The Applicant's consultant also noted separate incidences of fuel oil spills occurring off site, which may have the potential to migrate onto the property. These spills are not likely to be the responsibility of the subject site owner. The Commission finds that submission of the Phase I Environmental Site Assessment addresses BDP WR 5.6.

WRF5. The Commission finds the project has met MPS WR1.5 (*Turf and Landscape Management Plan*), by incorporating water conservation measures, the use of native and drought resistant plantings, providing drip irrigation, and minimizing the use of pesticides and chemical fertilizers by using organic products instead.

WRF6. The Commission finds the proposed stormwater design generally improves the existing drainage conditions and should meet the Massachusetts Stormwater Standards as well as MPS WR7.2 (*On-Site Infiltration*), MPS WR7.3 (*Roof Runoff*), and MPS WR7.4 (*Biofiltration Practices*). The Commission finds that the Applicant's revised stormwater management design includes catch-basins, oil-grit separators,

added tree-box type stormwater filters to the parking lot islands and grassed swales adjacent to the Town athletic fields to the extent feasible taking into account constraints created by the existing development. The parking in the northern area that serves the Town athletic fields will also be constructed with permeable paving materials. The Commission finds these modifications to the original design satisfy Low Impact Design stormwater as required by MPS WR7.4, MPS WR7.5 (*Structured Infiltration Devices*), and MPS WR7.6 (*Impervious Surfaces*).

WRF7. The Commission finds that in order to ensure compliance with MPS WR7.2, MPS WR7.3, MPS WR7.4, MPS WR7.5 and MPS WR7.6, it is appropriate to require the Applicant to submit for Commission staff review and approval final stormwater drainage calculations to including drainage flow-rates, sizing and Total Suspended Solids removal, consistent with Massachusetts Stormwater Management Standards, prior to issuance of a Preliminary Certificate of Compliance and prior to issuance of a Building Permit in accordance with in accordance with condition WRC3 of this decision.

WRF8. The Applicant prepared and submitted a draft Stormwater Pollution Prevention Plan (SWPPP) that addresses both construction and post-construction phases. The Applicant also stated that an EPA Notice of Intent application for a stormwater permit (a NPDES permit), along with the SWPPP would be filed with the EPA prior to the start of construction.

WRF9. The Applicant submitted a draft SWPPP that includes some maintenance items, however, the Commission finds that to comply with MPS WR7.9 (*Best Management Practices during Construction*) and MPS WR7.10 (*Stormwater Maintenance & Operations Plan*) (SMOP), more detail is required including long-term BMP-specific maintenance, a schedule for inspection and monitoring. As such, the Commission also finds it is it is appropriate to require the Applicant to submit for Commission staff review and approval a revised SMOP prior to issuance of a Final Certificate of Compliance and prior to issuance of a Certificate of Use/Occupancy in accordance with in accordance with condition WRC4 of this decision. The Commission also finds in order to comply with MPS WR7.10, it is appropriate to require that, one year from completion of the stormwater management system, that a Professional Engineer shall inspect the system and submit for Commission staff review a letter certifying that the system was installed and functions as designed in accordance with in accordance with condition WRC5 of this decision.

Wetlands, Wildlife & Plant Habitat & Open Space

WET/WLPH/OSF1. The project involves the redevelopment of a school and associated school grounds. The site is not located in a Significant Natural Resource Area, and there are no wetlands, vernal pools or rare species on the site. All aspects of the proposed development site are currently buildings, pavement, managed "grounds" or athletic fields. The Commission finds that due to the developed nature of the site, a Natural Resources Inventory (NRI) is not required and conformance with MPS WPH1.1 is not required. The Commission also finds that impacts to wildlife or plant habitat are not anticipated from the project, and that as a consequence, the project is consistent with MPS WET1.1 (*Wetlands*), MPS WET1.2 (*Wetland Buffers*), MPS WET1.3 (*Wetlands, Buffers, and Utility Line Installation*), MPS WET1.4 (*Stormwater & Wetlands*), MPS WPH1.3 (*Wildlife & Plant Habitat*), MPS WPH1.4 (*Rare Species*) and MPS WPH1.5 (*Vernal Pools*).

WET/WLPH/OSF2. The Commission finds that due to the developed nature of the site, open space is not required for this project. Therefore, the proposed development is consistent with MPS OS1.3. The Commission finds the project has clustered development onto portions of the site that are presently developed, consistent with MPS OS1.1 (*Clustering of Development*) and MPS WPH1.2 (*Clearing and Grading*). The Commission also finds that MPS OS1.2 (*Open Space Connections*), MPS OS1.4 (*Sensitive Natural Resources/Buffers*), MPS OS1.5 (*Residential Cluster/Subdivisions*), MPS OS1.6 (*Sensitive Natural Resources*), MPS OS1.7 (*Open Space in GIZ/Economic Centers*) and MPS OS1.8 (*Open Space Requirements & Parking Garages*) do not apply to the project.

Transportation

TF1. The former Simpkins School has two (2) driveways on Old Main Street and back access to the Lawrence MacArthur Elementary School. The Applicant proposes to maintain these driveways.

TF2. The Simpkins School formerly accommodated 275 students. The Commission finds that the site's use as a school was discontinued circa 2005.

TF3. The proposed site is not located in an existing Economic Center on the Regional Land Use Vision Map for Yarmouth.

TF4. The Applicant's representative has calculated the estimated trip generation for the former Simpkins School and the proposed *66* residential apartments based on the Institute of Transportation Engineers (ITE) *Trip Generation,* Eighth Edition, 2008 and are listed in the Table below.

	Former Simpkins School (275 students)[1]	Proposed 66 residential apartments	Net Change in Trips
Daily	355	524	+169
AM Peak Hour	124	36	-88
PM Peak Hour	77	54	-23

[1] Based on ITE LUC 520, Elementary School, 275 rooms

[2] Based on ITE LUC 220, Apartments, 66 units

TF5. Based on the net decrease in peak hour traffic, the project complies with MPS TR 3.2 (*Traffic Studies*), MPS TR3.4 (*Mitigation of Congestion Impacts Required*) and MPS TR3.6 (*Mitigation Fee*).

TF6. The standard of review for transportation safety impacts is twenty-five (25) or more new peak hour trips through a high crash location. A high crash location is defined as a location where three (3) or more crashes have occurred for three (3) consecutive years. Based on information submitted by the Applicant's Transportation Engineer, no high crash locations are impacted by twenty-five or more peak hour trips. Therefore, the Commission finds that the project complies with MPS TR1.1 (*Safety*).

TF7. Because the former Simpkins School is not located in an Economic Center on the Regional Land Use Vision Map, and has not been in operation within the last three (3) years, the Commission cannot automatically credit the project for the former traffic pursuant to MPS TR0.2. However, the Commission finds that a financial hardship exists from the requirement of MPS TR0.2 that restricts use of a traffic credit for a use that has been discontinued or vacated for five or more years. The Commission allows the Applicant a traffic credit for mitigation purposes. The Commission finds that relief may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act. The Commission finds that the relief granted relates directly to the nature of the hardship and is the minimum necessary to address the hardship. The Commission finds because the project is the renovation of and an addition to a historically significant building that is listed as a contributing structure to the South Yarmouth/Bass River National Register Historic District into 65 new 100% affordable housing units, that full compliance with MPS TR0.2 would constitute a financial hardship by adding an estimated $500,000 to project costs, and would diminish community benefits conferred to Yarmouth which are the *development of an adequate supply of fair affordable housing* and by *preservation of historical, cultural, archaeological, architectural and recreational values* by potentially making the project financially infeasible.

TF8. MPS TR3.1 requires all DRIs to perform a Level of Service analysis at their driveway regardless of traffic generation. This MPS was intended to require large-scale development with significant traffic credits to perform Level of Service analysis at their driveways so that the Commission would not potentially approve a project with failing driveway Level of Service. The Commission finds that this project is not a large-scale development with respect to MPS TR3.1. The Commission finds that a financial hardship exists from the requirement of MPS TR3.1 to perform a Level of Service analysis at the site driveway. The Commission grants the Applicant relief from the need to perform a Level of Service Analysis according to MPS TR3.1. The Commission finds that relief may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act. The Commission finds that the relief granted relates directly to the nature of the hardship and is the minimum necessary to address the hardship. The Commission finds because the project is the renovation of and an addition to a historically significant building that is listed as a contributing structure to the South Yarmouth/Bass River National Register Historic District into 65 new 100% affordable housing units, that full compliance with MPS TR3.1 would constitute a hardship by adding to project costs, and would diminish community benefits conferred to Yarmouth which are the *development of an adequate supply of fair affordable housing* and by *preservation of historical, cultural, archaeological, architectural and recreational values* by potentially making the project financially infeasible.

Waste Management

WMF1. The Commission finds that the proposed project will generate Hazardous Wastes from renovation/construction activities, including oil-based stains, varnishes and similar products, used fluorescent bulbs, used computers and monitors, asbestos-containing materials, lead-based paint coated building debris and PCB-containing lamp ballasts. To address MPS WM1.5 *(Compliance with Massachusetts Hazardous Waste Regulations)*, the Applicant must notify or register with the Massachusetts

Department of Environmental Protection, a plan is needed that addresses how the Hazardous Wastes will be managed prior to disposal, and information should be provided on the registered, licensed company that will dispose of the Hazardous Waste. The Commission finds that this information is needed prior to the issuance of a Preliminary Certificate of Compliance for the commencement of site construction in accordance with condition WMC1 of this decision.

WMF2. The Commission finds that to satisfy MPS WM1.5 for the occupancy phase, and to assist residents with proper management of the Hazardous Waste they generate, that the Applicant must create an educational flyer for residents that provides information on Yarmouth's household hazardous waste collections and other opportunities available in Yarmouth and at the Transfer Station. The Commission finds that this information is needed prior to issuance of a Final Certificate of Compliance for the Certificate of Use/Occupancy in accordance with condition WMC3 of this decision.

WMF3. The Commission finds that additional information is needed to address MPS WM2.1 and MPS WM2.2 *(Construction Waste/C&D Waste Plan)*. Specifically, the Applicant should provide a written plan regarding management of Construction & Demolition (C&D) waste generated by site preparation work which addresses the disposal of C&D waste and demonstrates how solid wastes and recyclable materials currently categorized by the MA DEP as a waste ban material will be handled, separated from C&D waste, and disposed of. The Commission finds that this information is needed prior to the issuance of the Preliminary Certificate of Compliance for the commencement of construction at the site in accordance with condition WMC2 of this decision.

WMF4. The Commission finds that additional information is needed to address MPS WM2.3 *(Post-Construction Waste)*. Specifically, the Applicant should ensure that adequate space is provided in the renovated building and new addition to accommodate the on-site collection and storage of recyclables prior to disposal through a third-party vendor. The Commission finds that this information is needed prior to the issuance of the Preliminary Certificate of Compliance for the commencement of construction at the site in accordance with condition WMC4 of this decision.

WMF5. The Commission finds that MPS WM2.4 (*Food-waste Recycling*) is not applicable to this project because the residential units that will be created will not generate a significant amount of food waste.

Energy

EF1. The Commission finds that based on the information received during the project review that the proposed residential redevelopment, is subject to MPS E1.1 and MPS E1.4.

EF2. The Commission finds that because of the proposed complete interior renovation of the existing school building, and because the building was not operational and therefore and has no energy performance or consumption data reflective of the building's use for at least three years (including for the proposed change of use) on which to base recommendations of an energy audit, that it is appropriate to waive MPS E1.1 (*Redevelopment Energy Audit*). The Commission finds that the Applicant has met its burden to show a Redevelopment Energy Audit would be unduly

burdensome, and that a hardship exists from this requirement. The Commission grants the Applicant relief from MPS E1.1. The Commission finds that relief may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act. The Commission finds that the relief granted relates directly to the nature of the hardship and is the minimum necessary to address the hardship. The Commission finds because the project is the renovation of and an addition to a historically significant building that is listed as a contributing structure to the South Yarmouth/Bass River National Register Historic District into 65 new 100% affordable housing units, that full compliance with MPS E1.1 would constitute a hardship by adding to project costs, and would diminish community benefits conferred to Yarmouth which are the *development of an adequate supply of fair affordable housing* and by *preservation of historical, cultural, archaeological, architectural and recreational values* by potentially making the project financially infeasible.

EF3. The Applicant has requested partial relief in meeting the *Building Envelope* (≤ 5 Air Changes per Hour (ACH) 50 Infiltration) part of MPS E1.4 (*Multi-family Projects, including Apartments*) for renovation of the existing building. Due to the historic nature of the existing building and the Applicant's intent to preserve this character, the Commission further finds that that a literal enforcement of the provisions of the *Building Envelope* component of MPS E1.4 for the existing school would involve a substantial financial hardship, and that relief from this requirement may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act. The Commission further finds that the relief granted relates directly to the nature of the hardship and is the minimum relief necessary to address the hardship.

EF4. The Commission finds that the proposed project will meet all other components of MPS E1.4 for the existing building, and for the new construction, and that to ensure that the remainder of the project is consistent with MPS E1.4 that it is appropriate to require the Applicant to provide for Commission staff review and approval project plans and construction documents prior to issuance of a Preliminary Certificate of Compliance in accordance with condition EC1 of this decision.

EF5. The Commission finds because the project is residential with no mixed-use component that MPS E1.2 (*Designed to Earn ENERGY STAR Certification*), MPS E1.3 (*ANSI/LEED standards*) and MPS E1.5 (*Onsite Renewable Energy Generation*) do not apply.

Affordable Housing

AHF1. Because the project involves the redevelopment of an existing school building into 65 affordable housing units, the Commission finds that MPS AH1.2 (*10% Requirement for Subdivisions of 10-plus Lots*), AH1.3 (*Cash Option*), MPS AH1.5 (*Off-site Option Criteria*), MPS AH1.6 (*Location of Off-site Option*), MPS AH1.7 (*Timing of Off-site Contribution*), MPS AH1.8 (*Timing & Mix of Affordable Units*), MPS AH1.14 (*No Reduction in Number of Existing Units*) and MPS AH2.4 (*Relocation Requirement*) and all parts of AH3 (*Mitigation for Commercial DRIs*) are not applicable to this project.

AHF2. The Applicant has chosen to satisfy the 10% requirement of MPS AH1.1 (*Residential Requirement*) on site, through the redevelopment of an existing school building into

sixty-five (65) units for households age 55 and older. The Commission finds that this complies with MPS AH1.1, and also exceeds the requirements set by MPS AH1.4 (*Calculation of Affordable Units*) through the creation of more than seven (7) affordable units.

AHF3. The Commission finds that in order to ensure compliance with MPS AH1.1 and MPS AH1.4, it is appropriate to require the Applicant to submit for Commission staff review and approval an affordable housing restriction and proof of recording of this restriction at the Barnstable County Registry of Deeds prior to issuance of a Preliminary Certificate of Compliance in accordance with condition AHC1 of this decision.

AHF4. Information submitted during the Commission's review indicates the project will create 4 studio units, 37 one-bedroom units, and 24 two-bedroom units. The unit sizes vary; however, all of the studio units, 27 of the one-bedroom units and 9 of the two-bedroom units meet Department of Housing and Community Development (DHCD) Local Initiative Program (LIP) size guidelines. Also, the overall average square footage of the one and two-bedroom units meets DHCD's LIP size minimums. Information and testimony submitted during the Commission's review also indicates that all of the 65 units will be visit-able, with 4 units to be fully disabled accessible, in conformance with MPS AH2.2 (*Visitability and/or Accessibility Requirement*). The Commission finds that the project as proposed meets MPS AH1.9 (*Integration & Size of Affordable Units*) and exceeds the number of units required to meet MPS AH2.2.

AHF5. The Commission finds that in order to ensure compliance with MPS AH1.9 and MPS AH2.2, it is appropriate to require the Applicant to submit for Commission staff review and approval construction plans and specifications prior to issuance of a Building Permit and Preliminary Certificate of Compliance in accordance with condition AHC2 of this decision.

AHF6. Information and testimony submitted during the Commission's review indicates the project will be able to achieve compliance with MPS AH1.10 (*ENERY STAR Requirement*) with the exception of the *Building Envelope* portion of this MPS for the existing school building. The Commission finds the rest of the proposed project will be able to achieve compliance with MPS AH1.10.

AHF7. The Commission finds that a hardship exists, financial or otherwise, and grants relief from MPS AH1.10 *ENERGY STAR Building Envelope* requirements for the existing building. The Commission finds that such relief may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act, and that the relief granted relates directly to the nature of the hardship and is the minimum necessary to address the hardship.

AHF8. The Commission finds that in order to ensure compliance with MPS AH1.10, excluding the *ENERGY STAR Building Envelope* requirement of MPS AH1.10 for the existing school building as noted in findings AHF6 and AHF7, it is appropriate to require the Applicant to submit for Commission staff review and approval of draft construction plans and specifications and also submit an architect's certification that the draft plans are consistent with the ENERGY STAR National Attached Builder Option Package Specifications or a preliminary Home Energy Rating System (HERS) analysis of the draft plans and specifications by a certified independent HERS rating

company prior to issuance of a Building Permit and Preliminary Certificate of Compliance and also prior to issuance of the Final Certificate of Compliance and Certificate of Use/Occupancy in accordance with conditions AHC3 and AHC4 of this decision.

AHF9. Information and testimony submitted during the Commission's review indicates that all of the units will be affordable to households at or below 60% of area median income. The Commission finds that the project as proposed meets MPS AH1.11 (*Pricing & Rents of Affordable Units*). The Commission finds that in order to ensure compliance with MPS AH1.11, it is appropriate to require the Applicant to submit for Commission staff review and approval the final proposed rents for all units prior to issuance of a Preliminary Certificate of Compliance and issuance of a Building Permit in accordance with condition AHC5 of this decision.

AHF10. As noted in finding AHF9, Commission finds that the project as proposed meets MPS AH1.11 (*Pricing & Rents of Affordable Units*). The Commission finds that in order to ensure compliance with MPS AH1.12 (*Permanent Affordability*) and MPS AH1.13 (*Monitoring of Affordability*), it is appropriate to require the Applicant to submit for Commission staff review and approval a list of proposed monitoring agents and a draft monitoring agreement and that such approved monitoring agreement is to be executed with the agreed-upon monitoring agent prior to issuance of a Preliminary Certificate of Compliance and prior to issuance of a Building Permit in accordance with condition AHC6 of this decision.

AHF11. The Commission finds that to ensure compliance with MPS AH1.12 and MPS AH1.13, it is appropriate to require the Applicant to submit for Commission staff review and approval a report from the monitoring agent that describes how and certifies that the occupants of the units are income eligible prior to issuance of the Final Certificate of Compliance and Certificate of Use/Occupancy in accordance with condition AHC7 of this decision.

AHF12. The Commission finds that to ensure compliance with MPS AH1.12 and MPS AH1.13, it is appropriate to require the Applicant to submit for Commission staff review and approval an affordable housing restriction prior to issuance of the Preliminary Certificate of Compliance and Building Permit and that such approved restriction be recorded at the Barnstable County Registry of Deeds prior to issuance of a Preliminary Certificate of Compliance and prior to issuance of a Building Permit in accordance with condition AHC8 of this decision.

AHF13. The Commission finds that to ensure compliance with MPS AH2.1 (*Non-discrimination)* and MPS AH2.3 (*Affirmative Marketing & Selection of Buyers/Tenants*), it is appropriate to require the Applicant to submit for Commission staff review and approval an affirmative marketing and tenant selection plan prior to issuance of the Preliminary Certificate of Compliance and Building Permit in accordance with condition AHC9 of this decision.

Heritage Preservation and Community Character

HPCCF1. The John Simpkins School is a three-story brick school building that was constructed in 1931 in the Colonial Revival style. The building has two side additions constructed of wood that were added at a later date, and both the original structure and these additions are considered historically significant. The building has a prominent

location on Old Main Street and is listed as a contributing building within the South Yarmouth/Bass River National Register Historic District.

HPCCF2. The proposed project involves reuse of the historic school building for residences. As shown on plans entitled *Simpkins School Residences, Yarmouth MA*, Sheets A-101 through A-105, and Sheets A-201 through A-202, prepared by ICON Architecture, and dated August 30, 2010, the proposed project preserves the historically significant portions of the Simpkins School building and proposes a rear addition that is consistent with the character of the historic structure. Because the proposed project retains the historic structure and key character-defining features, and because the proposed additions are consistent with the building's architectural style and do not diminish its historic and architectural significance, the Commission finds the project is consistent with MPS HPCC1.1 (*Historic Structures*). The project will apply for both state and federal historic preservation tax credits and, as such, is also required to be consistent with the Secretary of the Interior's Standards for Treatment of Historic Properties. This is believed to be the first project on Cape Cod to take advantage of federal and state historic preservation tax credits in an historic structure renovation.

HPCCF3. Given the project's location within an existing historic district and its preservation of the frontage of the property and of the fields to the rear of the site, the Commission finds the project is also consistent with MPS HPCC1.2 (*Cultural Landscapes*).

HPCCF4. In a letter dated August 26, 2010, the Massachusetts Historical Commission stated that the proposed project involves the sensitive rehabilitation of the John Simpkins School and will have "no adverse effect" on the property or the district. No impacts to archaeological resources are anticipated. The Commission therefore finds the project is consistent with MPS HPCC1.3 (*Archeological Sites*).

HPCCF5. The proposed rear addition to the Simpkins School building is consistent with community character standards related to building design, including MPS HPCC2.4 (*Consistency with Regional Context or Surrounding Distinctive Area*), MPS HPCC2.5 (*Footprints Over 15,000 Square Feet*) and MPS HPCC 2.6 (*Building Forms and Facades*), which require all development to be consistent with the region's traditional development patterns, including scale. Given the project's reuse of an existing historic structure within a National Register Historic District, and given the fact that the proposed addition is broken down into smaller massing components with varied setbacks and rooflines and façade variation, the Commission finds the proposed project is consistent with these RPP standards. The Commission finds that to ensure compliance with MPS HPCC1.1, MPS HPCC1.2, MPS HPCC2.4, MPS HPCC2.5 and MPS HPCC2.6, that it is appropriate to require the Applicant to renovate and construct an addition to the John Simpkins School building in accordance with the approved elevation drawings, footprint plans and roof plans and for this decision to note that any changes to the project will also be reviewed for consistency with the Secretary of the Interior's Standards for Treatment of Historic Properties.

HPCCF6. Information and testimony received during the Commission's review indicates the proposed redevelopment meets MPS HPCC2.8 (*Parking to Side or Rear of Buildings*) and MPS HPCC2.9 (*Landscaping Improvements for Redevelopment*) by maintaining existing buffers between the proposed parking areas and the street, and

through landscaping of interior parking lots. The Commission further finds that the proposed redevelopment meets MPS HPCC2.9 and MPS HPCC2.10 (*Landscape Plan Requirements*) by a proposal to implement a landscape plan, received by the Commission on October 13, 2010, which incorporates trees and native plantings in the parking lot islands as well as species of trees that are not susceptible to excessive autumn droppage of fruit. The Commission finds that to ensure compliance with MPS HPCC2.9 and MPS HPCC2.10, it is appropriate to require the Applicant to submit for Commission staff review and approval a final landscape plan, and a landscape maintenance agreement that covers a minimum of three growing seasons prior to issuance of a Final Certificate of Compliance in accordance with condition HPCCC1 of this decision.

HPCCF7. The Commission finds that more information is needed to address MPS HPCC2.11 *(Exterior Lighting)*. Specifically, the Applicant must provide a copy of site plans and other technical information on exterior lighting to ensure its consistency with MPS HPCC2.11 and Technical Bulletin 95-001 *(DRI Guidance for Exterior Lighting Design)*. The Commission finds that because the project is the redevelopment of a significant historic structure, and that the exterior lighting should be closely coordinated with the site and building design, that it is appropriate to require exterior lighting information be submitted and a staff site inspection of the final exterior lighting design be required prior to the issuance of the Final Certificate of Compliance and Certificate of Use/Occupancy in accordance with conditions HPCCC2 and HPCCC3 of this decision.

CONCLUSION

Based on the above findings, the Commission hereby concludes:

1. That the probable benefits of the proposed project are greater than the probable detriments. This conclusion is supported by findings GF5, LUF2 and LUF3.

2. The project is eligible for designation as a Hardship Exemption Project of Community Benefit as outlined in finding GF6.

3. That upon satisfaction of the conditions identified in this decision, the proposed project is consistent with the 2009 (as amended) Regional Policy Plan.

4. The project can be found consistent with Yarmouth's Local Comprehensive Plan as outlined in finding GF2. Upon Zoning Board of Appeals action to allow the proposed multi-family use in a residential zone, the project can be found consistent with Yarmouth's local development by-laws/ordinances, as outlined in finding GF3.

5. The project is not located in a District of Critical Planning Concern as noted by finding GF4, and therefore can be considered to be consistent with this criterion.

CONDITIONS

The Commission hereby approves, with conditions, the Hardship Exemption Project of Community Benefit application of Stratford Capital Group the proposed project located at 134 Old Main Street, South Yarmouth, MA provided the following conditions are met:

General Conditions

GC1. This decision is valid for a period of 7 years and local development permits may be issued pursuant hereto for a period of 7 years from the date of this written decision.

GC2. The Applicant shall obtain all necessary federal, state, and local permits for the proposed project.

GC3. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, and remain in compliance herewith, shall be deemed cause to revoke or modify this decision.

GC4. No development work, as the term "development" is defined in the Cape Cod Commission Act, shall be undertaken until all appeal periods have elapsed or, if such an appeal has been filed, until all judicial proceedings have been completed.

GC5. Prior to issuance of a Preliminary Certificate for any proposed "development" as defined by the Cape Cod Commission Act and as approved herein, the Applicant shall submit final plans as approved by state, federal, and local boards for review by Commission staff to determine their consistency with this decision. If Commission staff determines that the final plans are not consistent with those plans approved as part of this decision, the Commission shall require that the Applicant seek a modification to this decision in accordance with the Modification section of the Commission's *Enabling Regulations* in effect at the time the modification is sought.

GC6. All development shall be constructed in a manner consistent with the following plans and other information attached hereto as Exhibit A:

Simpkins School Residences Permitting Plans, Drawings by Coler & Colantonio, Inc., and ICON Architecture, Received by Commission 8/30/10, Drawings include:

Cover Sheet
Existing Conditions Plans dated 4/16/10, (2 Sheets)
Erosion Control Plans dated 8/25/10, (C-102 and C-103)
Demolition Plans, dated 8/25/10, (C-104 and C-105)
Layout Plans, dated 8/25/10, (C-201 and C-202)
Grading and Utility Plan, dated 8/25/10, (C-203 and C-204)
Site Details Plan, dated 8/25/10 (C-300, C-301, C-302, C-303)
Site General Notes, dated 8/25/10 (C-304)
Lower Level Plan, dated 8/30/10 (A-101)
Ground Level Plan, dated 8/30/10 (A-102)
Intermediate Level Plan, dated 8/30/10 (A-103)
Upper Level Plan, dated 8/30/10 (A-104)
Roof Plan, dated 8/30/10 (A-105)
Building Elevations, dated 8/30/10 (A-201 and A-202)

Simpkins School Residences, Drawing by Coler & Colantonio, Inc. and ICON Architecture, Received by Commission 9/17/10, *Overall Layout Plan,* dated 9/17/10, C-200

Simpkins School Residences, Drawing by Coler & Colantonio, Inc. and ICON Architecture, Received by Commission October 13, 2010, *Layout Plans* dated 825/10,

C-201 and C-2002, No revision date shown on the plan, but these plans were revised to show landscape plant key

GC7. Any deviation to the proposed project from the approved plans, including but not limited to changes to the design, location, lighting, landscaping, or other site work, shall require approval by the Commission through its modification process, pursuant to the Commission's *Enabling Regulations*. The Applicant shall submit to the Commission any additional information deemed necessary to evaluate any modifications to the approved plans or other documents.

GC8. Prior to the issuance of a Building Permit for development, the Applicant shall obtain a Preliminary Certificate of Compliance from the Commission that states that all conditions in this decision pertaining to issuance of a Building Permit have been met. Such Certificate of Compliance shall not be issued unless all applicable conditions have been complied with.

GC9. Prior to issuance of a Certificate of Use/Occupancy, the Applicant shall obtain a Final Certificate of Compliance from the Commission that states that all conditions pertaining to issuance of a Certificate of Use/Occupancy have been met. Such Certificate of Compliance shall not be issued unless all applicable conditions have been complied with.

GC10. Prior to the issuance of a Preliminary Certificate of Compliance, the Applicant shall provide written proof to the Commission that a copy of this decision has been provided to the general contractor(s) at least thirty (30) calendar days prior to commencement of construction.

GC12. The Applicant shall notify Commission staff in writing at least thirty (30) calendar days prior to its intent to seek a Preliminary and Final Certificate of Compliance. Such notification shall include a list of key contact(s), along with their telephone numbers, mailing addresses, and email addresses, for questions that may arise during the Commission's compliance review. Commission staff shall complete an inspection under this condition, if needed, and inform the Applicant in writing of any deficiencies and corrections needed. The Commission has no obligation to issue any Certificate of Compliance unless and until all conditions are complied with.

GC13. The Applicant agrees to allow Commission staff to enter onto the property, which is the subject of this decision, after reasonable notice to the Applicant, for the purpose of determining whether the conditions contained in this decision including those linked to each Preliminary and Final Certificate of Compliance have been met.

Water Resources

WRC1. Prior to the start of any construction, and prior to issuance of a Building Permit, and issuance of a Preliminary Certificate of Compliance, the Applicant shall submit to Commission staff evidence of submission to EPA of an EPA Notice of Intent application for a stormwater permit (NPDES permit), including an updated SWPPP.

WRC2. Prior to issuance of a Final Certificate of Compliance, and prior to issuance of a Certificate of Use/Occupancy, the Applicant shall submit to Commission staff evidence that the 10,000 underground storage tank has been removed and soils and

groundwater in the area have been inspected for evidence of any further releases of petroleum.

WRC3. Prior to issuance of a Preliminary Certificate of Compliance, and prior to issuance of a Building Permit, the Applicant shall provide for Commission staff review and approval final stormwater drainage calculations including drainage flow-rates, sizing and Total Suspended Solids removal, consistent with Massachusetts Stormwater Management Standards.

WRC4. Prior to issuance of the Final Certificate of Compliance, and prior to issuance of the Certificate of Use/Occupancy, the Applicant shall submit a Professional engineer-certified SMOP to comply with WR7.10 that includes BMP-specific language and a schedule for inspection, monitoring and maintenance. The SMOP shall also identify the parties responsible for plan implementation, operation and maintenance, as well as keeping records for maintenance and inspection. These records shall be made available to the Commission staff or local Board of Health staff upon written request. The SMOP shall also include specific maintenance requirements for tree-box filters and areas of pervious pavement, and shall include specific language that prohibits stockpiling snow in or around any bioretention area.

WRC5. As required by MPS WR7.10, one year from completion of the stormwater management system, a Professional Engineer shall inspect the system and submit to the Commission staff a letter or other documentation certifying that the system was installed and functions as designed.

Waste Management

WMC1. Prior to the issuance of the Preliminary Certificate of Compliance for commencement of site construction, the Applicant shall submit for Commission staff review and approval, a copy of a plan or plans that address MPS WM1.5 *(Compliance with Massachusetts Hazardous Waste Regulations)*. The Preliminary Certificate of Compliance for site construction shall not be issued until Commission staff issues a written approval indicating conformance with this condition.

WMC2. Prior to issuance of the Preliminary Certificate of Compliance for any development approved herein, the Applicant shall submit for Commission staff review and approval a copy of a plan or plans that address MPS WM2.1 and MPS WM2.2 (*Construction Waste; C&D Waste Plan*). The Preliminary Certificate of Compliance for site construction shall not be issued until Commission staff issues a written approval indicating conformance with this condition.

WMC3. Prior to the issuance of the Final Certificate of Compliance for the Certificate of Use/Occupancy, the Applicant shall submit for Commission staff review and approval, a copy of an educational flyer for residents that provides information on opportunities to dispose of household hazardous waste in Yarmouth to address MPS WM1.5 *(Compliance with Massachusetts Hazardous Waste Regulations)* for the occupancy phase. The Final Certificate of Compliance shall not be issued until Commission staff issues a written approval indicating conformance with this condition.

WMC4. Prior to the issuance of the Final Certificate of Compliance, the Applicant shall submit for Commission staff review and approval a copy of final building plans

and/or other information to address MPS WM2.3 (*Post-Construction Waste*). The Final Certificate of Compliance shall not be issued until Commission staff issues a written approval indicating conformance with this condition.

Energy

EC1. Prior to the issuance of a Preliminary Certificate of Compliance, and prior to issuance of a Building Permit, the Applicant shall submit final project plans for Commission staff review and approval to ensure compliance with all components of MPS E1.4, except the *Building Envelope* requirement (≤ 5 ACH 50 Infiltration) for the existing school building.

Affordable Housing

AHC1. To ensure compliance with MPS AH1.1 and MPS AH1.4, the Applicant shall submit for Commission staff review and approval an affordable housing restriction and record of this restriction at the Barnstable County Registry of Deeds prior to issuance of a Preliminary Certificate of Compliance and prior to issuance of a Building Permit.

AHC2. Prior to issuance of a Preliminary Certificate of Compliance, and prior to issuance of a Building Permit, to ensure compliance with MPS AH1.9 and MPS AH2.2, the Applicant shall submit for Commission staff review and approval construction plans and specifications that show: 1) unit sizes, 2) four (4) units that are both handicapped accessible and can be lived in by handicapped persons, and 3) provisions to make all units visit-able.

AHC3. To ensure compliance with MPS AH1.10, excluding the *ENERGY STAR Building Envelope* requirement of MPS AH1.10 for the existing school building, the Applicant shall submit for Commission staff review and approval final construction plans and specifications and also submit an architect's certification that the final plans are consistent with the ENERGY STAR National Attached Builder Option Package Specifications or a preliminary HERS analysis of the plans and specifications by a certified independent HERS rating company prior to issuance of a Building Permit and Preliminary Certificate of Compliance.

AHC4. To ensure compliance with MPS AH1.10, excluding the *ENERGY STAR Building Envelope* requirement of MPS AH1.10 for the existing school building, the Applicant shall submit for Commission staff review an architect's certification that the new addition was constructed in accordance with the ENERGY STAR National Attached Builder Option Package Specifications or a final HERS analysis by a certified independent HERS rating company prior to issuance of the Final Certificate of Compliance and Certificate of Use/Occupancy.

AHC5. To ensure compliance with MPS AH1.11, the Applicant shall submit for Commission staff review and approval the final proposed rents for all units prior to issuance of a Preliminary Certificate of Compliance and issuance of a Building Permit.

AHC6. To ensure compliance with MPS AH1.12 and MPS AH1.13, the Applicant shall submit for Commission staff review and approval a list of proposed monitoring agents and a draft monitoring agreement and such approved monitoring agreement shall be executed with the agreed-upon monitoring agent prior to issuance of a Preliminary Certificate of Compliance and prior to issuance of a Building Permit.

AHC7. To ensure compliance with MPS AH1.12 and MPS AH1.13, the Applicant shall submit for Commission staff review and approval a report from the monitoring agent that describes how and certifies that any occupants of the units are income eligible prior to issuance of the Final Certificate of Compliance and Certificate of Use/Occupancy.

AHC8. To ensure compliance with MPS AH1.12 and MPS AH1.13, the Applicant shall submit for Commission staff review and approval an affordable housing restriction prior to issuance of the Preliminary Certificate of Compliance and Building Permit and such approved restriction shall be recorded at the Barnstable County Registry of Deeds prior to issuance of a Final Certificate of Compliance and prior to issuance of a Certificate of Use/Occupancy.

AHC9. To ensure compliance with MPS AH2.1 and MPS AH2.3, the Applicant shall submit for Commission staff review and approval an affirmative marketing and tenant selection plan prior to issuance of the Preliminary Certificate of Compliance and Building Permit.

Heritage Preservation and Community Character

HPCC1. To ensure compliance with MPS HPCC1.1, MPS HPCC.1.2, MPS HPCC2.4, MPS HPCC2.5, and MPS HPCC 2.6, the Applicant shall renovate and construct an addition to the John Simpkins School building in accordance with the approved plans, elevation drawings, footprint plans, roof plan and other documents as noted in General Condition GC6. Should unexpected conditions arise during demolition and construction that require redesign of the building, the Applicant shall obtain approval from Commission staff or the Commission prior to the start of construction as required by the modification process, pursuant to the Commission's *Enabling Regulations*. The Applicant shall submit to the Commission any additional information deemed necessary to evaluate any modifications to the approved plans or other documents. Modifications made during construction that are in accordance with the approved elevation drawings and other information noted in General Condition G6 may be considered as Minor Modifications #1. It is understood that any changes to the project will also be reviewed for consistency with the Secretary of the Interior's Standards for Treatment of Historic Properties.

HPCCC2. To ensure compliance with MPS HPCC2.9 and MPS HPCC2.10, the Applicant shall submit for Commission staff review and approval a final landscape plan, and a landscape maintenance agreement that covers a minimum of three growing seasons prior to issuance of a Final Certificate of Compliance and Certificate of Use/Occupancy.

HPCCC3. Prior to issuance of the Final Certificate of Compliance and prior to issuance of the Certificate of Use/Occupancy, the Applicant shall submit for Commission staff review and approval information on exterior lighting for the site and building that addresses MPS HPCC2.11 and Technical Bulletin 95-001 (as amended). All new exterior lighting for the project shall be in conformance with MPS HPCC2.11.

HPCCC4. Prior to issuance of the Final Certificate of Compliance and prior to issuance of a Certificate of Use/Occupancy, Commission staff must conduct a site visit to verify conformance with condition HPCCC1. The Final Certificate of Compliance and a Certificate of Use/Occupancy shall not be issued until Commission staff issues a written approval of the final exterior lighting design.

SUMMARY

The Cape Cod Commission hereby approves with conditions the application of Stratford Capital Group for the renovation of and addition to the Simpkins School building at 234 Old Main Street, South Yarmouth as a DRI Hardship Exemption/Project of Community Benefit as outlined in this decision pursuant to Sections 12, 13 and 23 of the Act, c. 716 of the Acts of 1989, as amended.

Royden Richardson, Commission Chair

January 6, 2011
Date

COMMONWEALTH OF MASSACHUSETTS

Barnstable, ss January 6, 2011

Before me, the undersigned notary public personally appeared Royden Richardson, in his capacity as Chairman of the Cape Cod Commission, whose name is signed on the preceding document, and such person acknowledged to me that he signed such document voluntarily for its stated purpose. The identity of such person was proved to me through satisfactory evidence of identification, which was [_] photographic identification with signature issued by a federal or state governmental agency, [_] oath or affirmation of a credible witness, or [✓] personal knowledge of the undersigned.

Gail P. Hanley
Notary Public

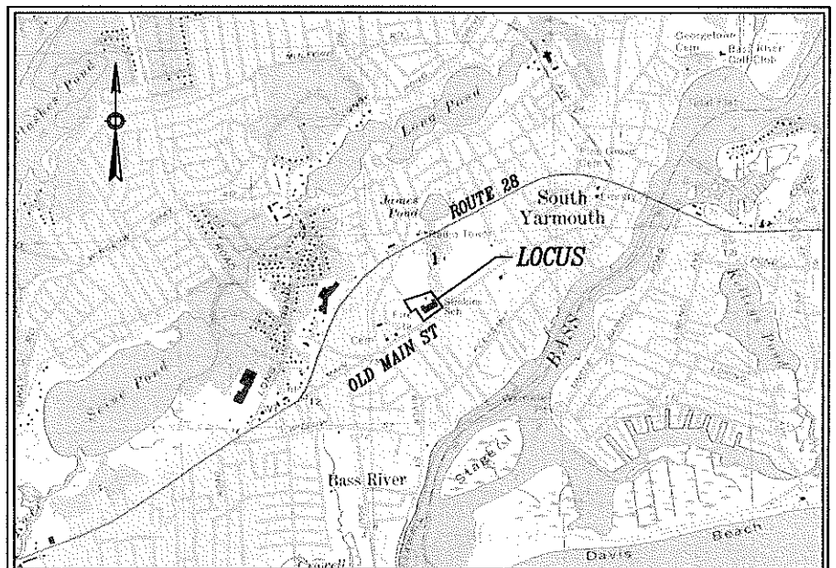
My Commission Expires: 10/13/11

SIMPKINS SCHOOL RESIDENCES
PERMITTING PLANS

134 OLD MAIN STREET
SOUTH YARMOUTH, MASSACHUSETTS

DRAWING LIST

SHEET NUMBER	TITLE
–	COVER
C-100 THRU C-101	EXISTING CONDITIONS PLAN
C-102 THRU C-103	EROSION CONTROL
C-104 THRU C-105	DEMO PLAN
C-200	OVERALL LAYOUT PLAN
C-201 THRU C-202	LAYOUT PLANS
C-203 THRU C-204	GRADING & UTILITIES PLANS
C-300 THRU C-303	SITE DETAILS
C-304	GENERAL NOTES
A-101 THRU A-105	FLOORPLANS
A-201 THRU A-202	BUILDING ELEVATIONS



YARMOUTH QUADRANGLE

LOCUS MAP

SCALE: 1" = 1,000'

CIVIL ENGINEER/LANDSCAPE ARCHITECT:

COLER & COLANTONIO, INC.
101 ACCORD PARK DRIVE
NORWELL, MA 02061

SURVEYOR/TRANSPORTATION:

COLER & COLANTONIO, INC.
101 ACCORD PARK DRIVE
NORWELL, MA 02061

ARCHITECT:

ICON ARCHITECTURE, INC.
38 CHAUNCY STREET
BOSTON, MA 02111

PERMITTING USE ONLY

NO.	DATE	SUBMISSION/REVISIONS	BY	CHK	APP'D
1	6-18-10	SITE PLAN REVIEW SUBMISSION	STAFF	DAR/KK	KK
2	8-25-10	CAPE COD COMMISSION SUBMISSION	STAFF	DAR/KK	KK

STAMP:

OWNER:
TOWN OF YARMOUTH
TAX ASSESSOR REF: MAP 51 LOT 51

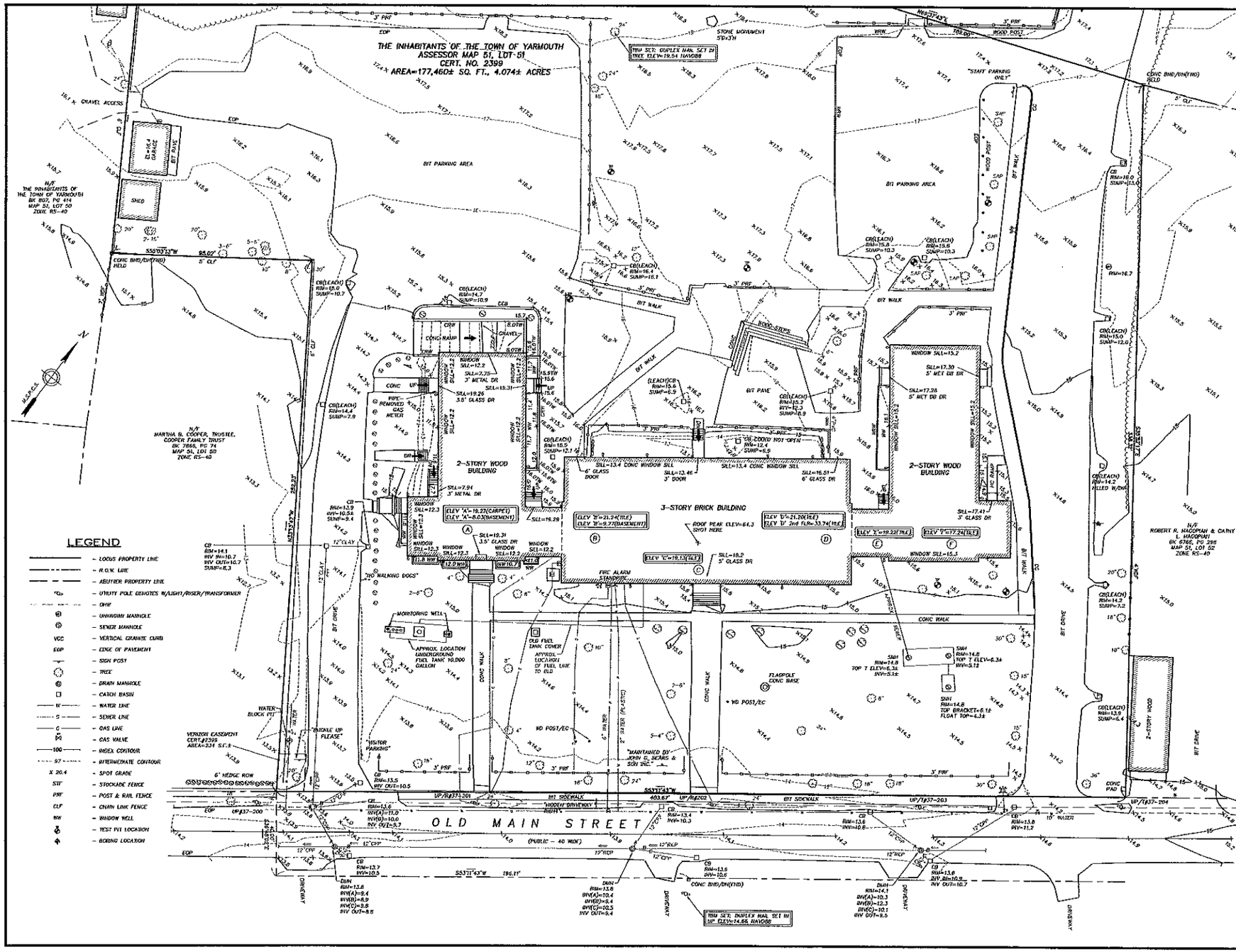
INHABITANTS OF YARMOUTH
TAX ASSESSOR REF: MAP 31 LOT 130

APPLICANT:
STRATFORD CAPITAL GROUP, INC.
100 CORPORATE PLATE
PEABODY, MA 01960

CONSULTING ENGINEER:
COLER & COLANTONIO, INC.
Ph: 781-982-5400
Fax: 781-982-5420
www.coler-colantonio.com
101 Accord Park Drive
Norwell, MA 02061

TITLE:
SIMPKINS SCHOOL RESIDENCES
COVER SHEET

DRAWING NAME: 26-130 Cover.dwg	
JOB NUMBER: 26-130	DATE: 03-25-10
DESIGN: STAFF	CHECK: DAR/KK
SCALE: AS NOTED	SHEET NO.: 1



REVISIONS:

No.	DATE

GENERAL NOTES:

1. SURFACE OBSERVABLE INFORMATION SHOWN HEREON IS THE RESULT OF AN ON-THE-GROUND SURVEY PERFORMED BY COLER & COLANTONIO, INC. IN FEBRUARY 2010.

2. ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD 88 AND HAVE BEEN ESTABLISHED FOR PERMITTING AND DESIGN PURPOSES ONLY. REFERENCE BENCHMARK: TOP OF CONC BOUND AT FIRE STATION 1 (SOUTH WESTERLY SIDELINE) ELEV=16.45, PROVIDED BY THE TOWN OF YARMOUTH ENGINEERING DEPT. (SEE AS-BUILT PLAN)

3. THE LOCUS LIES WITHIN FLOOD PLAIN ZONE "C" (AREA OF MINIMAL FLOODING) AS SHOWN ON F.I.R.M. COMMUNITY-PANEL NUMBER 250015 0004 C, REVISED DATE OF JUNE 17, 1980, AND CONFIRMED ON THE 2003 PRELIMINARY FLOOD HAZARD ZONES, TOWN OF YARMOUTH - SOUTHEAST QUADRANT, MAP ON THE TOWN OF YARMOUTH GIS WEB PAGE.

4. LOCATION OF SUBSURFACE UTILITIES SHOWN HEREON ARE APPROXIMATE AND ADDITIONAL UTILITIES MAY EXIST THAT ARE NOT SHOWN ON THIS PLAN. LOCATIONS ARE COMPILED FROM UTILITY PLANS OF RECORD AND DIG-SAFE FIELD MARKINGS. RIM AND INVERT INFORMATION HAS BEEN COMPILED AND FIELD VERIFIED WHERE POSSIBLE. THIS INFORMATION IS NOT TO BE USED FOR CONSTRUCTION. PRIOR TO ANY CONSTRUCTION, CONTACT DIG-SAFE AT (1-800-344-7233) TO FIELD VERIFY LOCATION OF ALL UTILITIES.

5. THE LOCUS IS SHOWN IN ZONING DISTRICT "RS-40", ON THE TOWN OF YARMOUTH ZONING MAP, AS REVISED THROUGH APRIL 10, 2007.

ZONING SETBACK REQUIREMENTS:

MINIMUM LOT SIZE: 40,000 SQ. FT.
MINIMUM LOT FRONTAGE: 150 FT.
MINIMUM FRONT YARD: 30 FT.
MINIMUM SIDE YARD: 20 FT.
MINIMUM REAR YARD: 20 FT.
MAXIMUM HEIGHT: 3 STORIES OR 35 FEET

6. UNLESS OTHERWISE NOTED DEED AND PLAN REFERENCES ARE TO THE BARNSTABLE COUNTY REGISTRY OF DEEDS.

7. PLAN REFERENCES:

- LC PLAN 14244A
- PLAN BOOK 311, PAGE 60
- PLAN BOOK 42, PAGE 69

COLER & COLANTONIO INC
ENGINEERS AND SCIENTISTS
781-882-5400
Fax:781-982-5490
101 Accord Park Drive
Norwell, MA 02061-1685

4-28-10

TITLE:

EXISTING CONDITIONS PLAN

SHEET 1

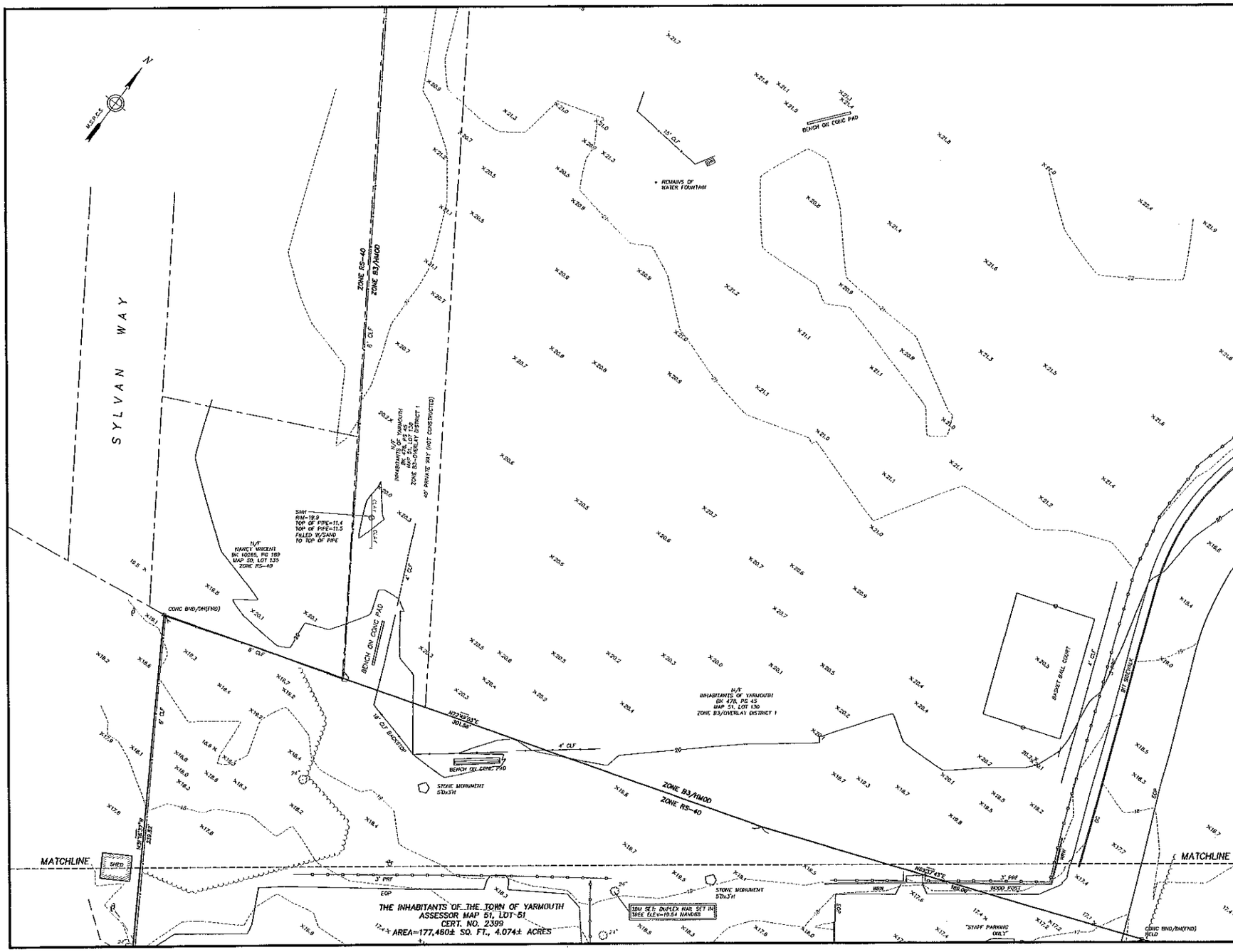
JOHN SIMPKINS SCHOOL
134 OLD MAIN STREET
YARMOUTH, MA

PREPARED FOR:

STRATFORD CAPITAL GROUP, LLC
100 CORPORATE PLACE
SUITE 404
PEABODY, MA 01960

DATE: APRIL 16, 2010	
COMP./DESIGN: JFS/UAK	
CHECK: EJP	
DRAWN: UAK	
SCALE: 1" = 20'	
JOB NO.: F:\Project\UAK\Yarmouth\ZZAdmin51\134-JohnSimpkinsSchool	
DWG NO.: Simpkins School	SHEET 1 OF 2

20 10 0 20 40



REVISIONS:

No.	DATE	

GENERAL NOTES:

SEE SHEET 1 FOR GENERAL NOTES.

COLER & COLANTONIO INC
ENGINEERS AND SCIENTISTS

781-982-5400
Fax 781-982-5490

101 Accord Park Drive
Norwell, MA 02061-1685

4-28-10

TITLE:

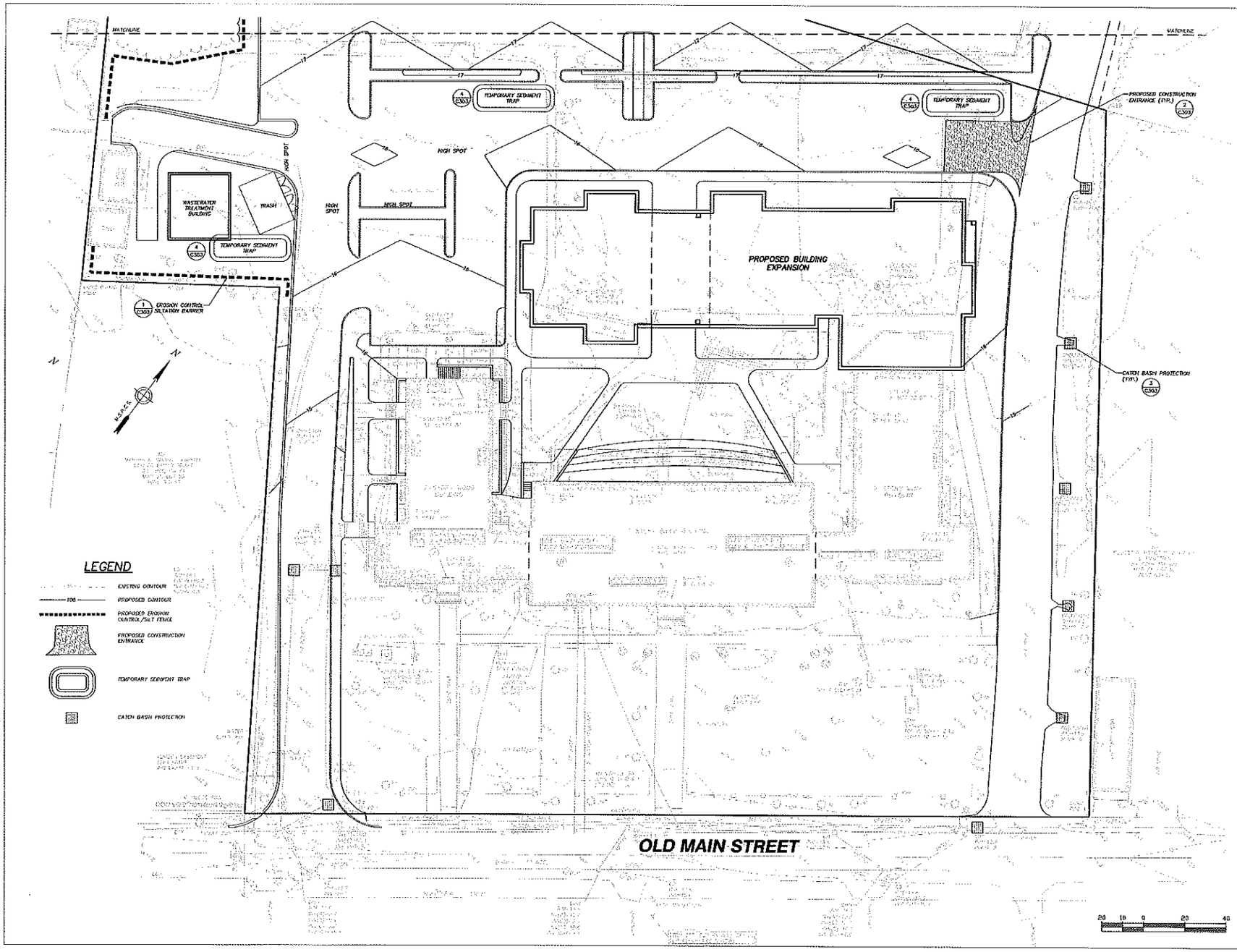
EXISTING CONDITIONS PLAN
SHEET 2
JOHN SIMPKINS SCHOOL
134 OLD MAIN STREET
YARMOUTH, MA

PREPARED FOR:

STRATFORD CAPITAL
GROUP, LLC
100 CORPORATE PLACE
SUITE 404
PEABODY, MA 01960

DATE: APRIL 16, 2010	
COMP./DESIGN: JFS/UAK	
CHECK: EJP	
DRAWN: UAK	
SCALE: 1" = 20'	
JOB NO.: F:\Project\MA\Yarmouth\04MA51\134-John\SimpkinsSchool	
DWG NO.: Simpkins School	SHEET 2 OF 2

20 10 0 20 40



The Simpkins School Residences

Yarmouth, MA

Stratford Capital Group

ICON architecture

38 Chauncy Street Boston, MA 02111
www.iconarch.com

COLER & COLANTONIO INC
ENGINEERS AND SCIENTISTS

781-982-5400
Fax 781-982-5490

101 Accord Park Drive
Norwell, MA 02061

COMMONWEALTH OF MASSACHUSETTS
KELLY JOSEPH KIRK
CIVIL
No. 39061
REGISTERED PROFESSIONAL ENGINEER

8-25-10

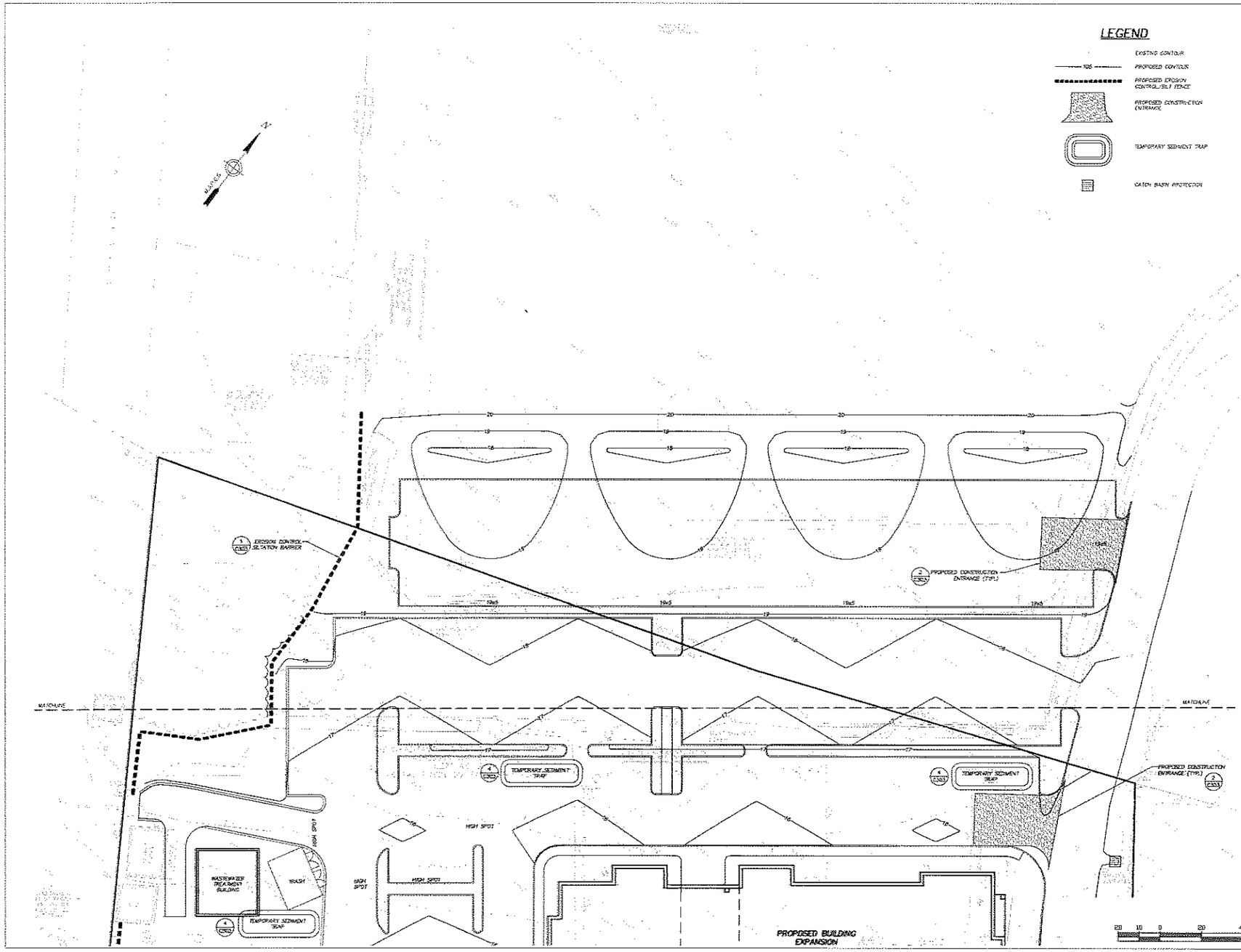
MARK	DATE	DESCRIPTION
1	08/25/10	CAPE COD COMMISSION SUB.

PROJECT NO.: 26-130
DRAWN BY: BPG/SZ
CHECKED BY: KK

SHEET TITLE

EROSION CONTROL

C-102



The Simpkins School Residences

Yarmouth, MA

Stratford Capital Group

ICON architecture

COLER & COLANTONIO INC

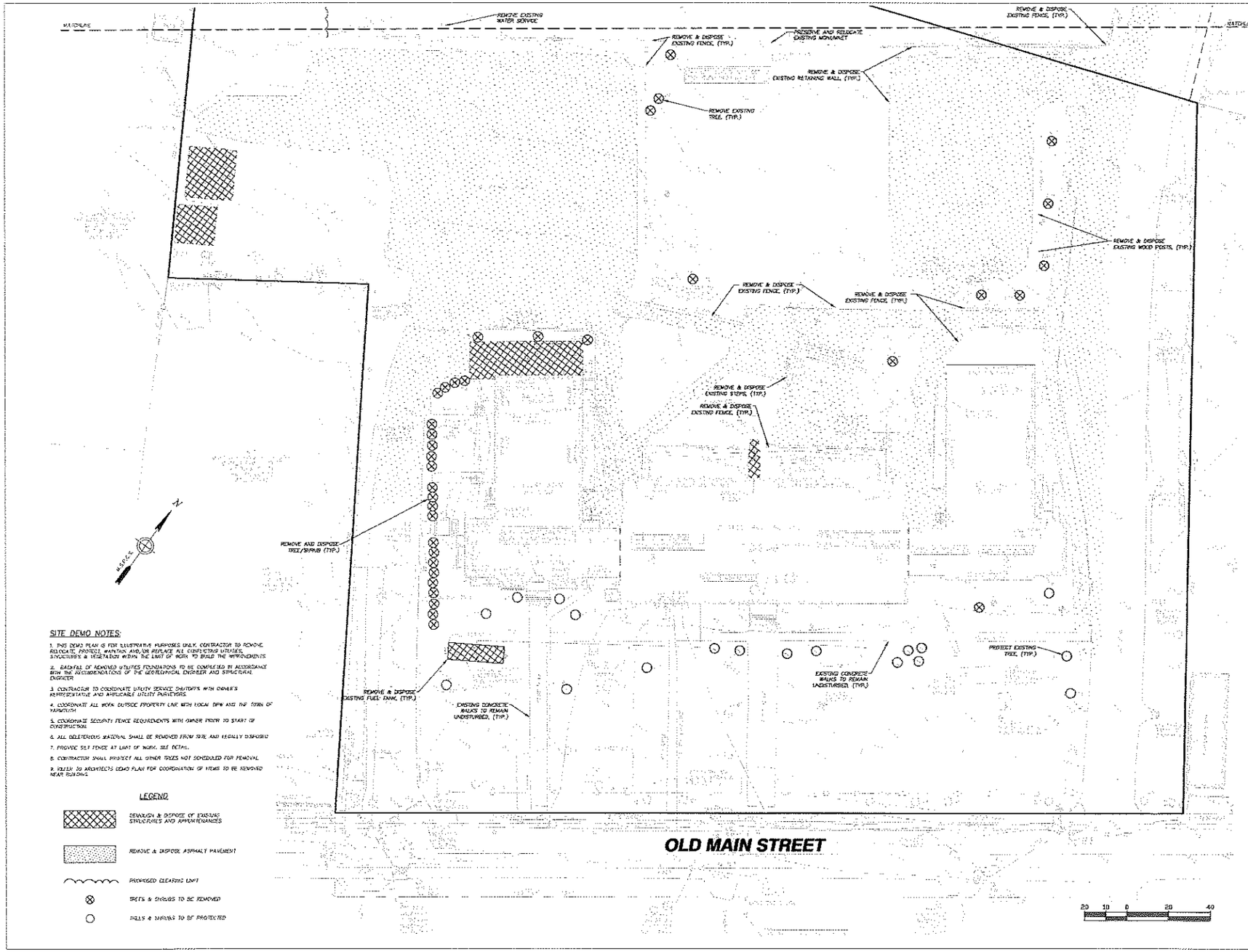
MARK	DATE	DESCRIPTION
1	08/25/10	CAPE COD COMMISSION SUB.

PROJECT NO.: 26-130
DRAWN BY: BPG/SZ
CHECKED BY: KK

SHEET TITLE

EROSION CONTROL

C-103



SITE DEMO NOTES:

1. THIS DEMO PLAN IS FOR ILLUSTRATIVE PURPOSES ONLY. CONTRACTOR TO REMOVE, RELOCATE, PROTECT, MAINTAIN AND/OR REPLACE ALL CONFLICTING UTILITIES, STRUCTURES & VEGETATION WITHIN THE LIMIT OF WORK TO BUILD THE IMPROVEMENTS
2. BACKFILL OF REMOVED UTILITIES FOUNDATIONS TO BE COMPACTED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER AND STRUCTURAL ENGINEER
3. CONTRACTOR TO COORDINATE UTILITY SERVICE SHUTOFFS WITH OWNER'S REPRESENTATIVE AND APPLICABLE UTILITY PURVEYORS
4. COORDINATE ALL WORK OUTSIDE PROPERTY LINE WITH LOCAL DPW AND THE TOWN OF YARMOUTH
5. COORDINATE SECURITY FENCE REQUIREMENTS WITH OWNER PRIOR TO START OF CONSTRUCTION
6. ALL DELETERIOUS MATERIAL SHALL BE REMOVED FROM SITE AND LEGALLY DISPOSED
7. PROVIDE SILT FENCE AT LIMIT OF WORK. SEE DETAIL.
8. CONTRACTOR SHALL PROTECT ALL OTHER TREES NOT SCHEDULED FOR REMOVAL
9. REFER TO ARCHITECTS DEMO PLAN FOR COORDINATION OF ITEMS TO BE REMOVED NEAR BUILDING

LEGEND

- DEMOLISH & DISPOSE OF EXISTING STRUCTURES AND APPURTENANCES
- REMOVE & DISPOSE ASPHALT PAVEMENT
- PROPOSED CLEARING LIMIT
- TREES & SHRUBS TO BE REMOVED
- TREES & SHRUBS TO BE PROTECTED

The Simpkins School Residences

Yarmouth, MA

Stratford Capital Group

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www.iconarch.com

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ENGINEERS AND SCIENTISTS
781-982-5400
Fax 781-982-5480
101 Accord Park Drive
Norwell, MA 02061

COMMONWEALTH OF MASSACHUSETTS
KELLY KALLEN CHAN
No. 34691
REGISTERED PROFESSIONAL ENGINEER
8-25-10

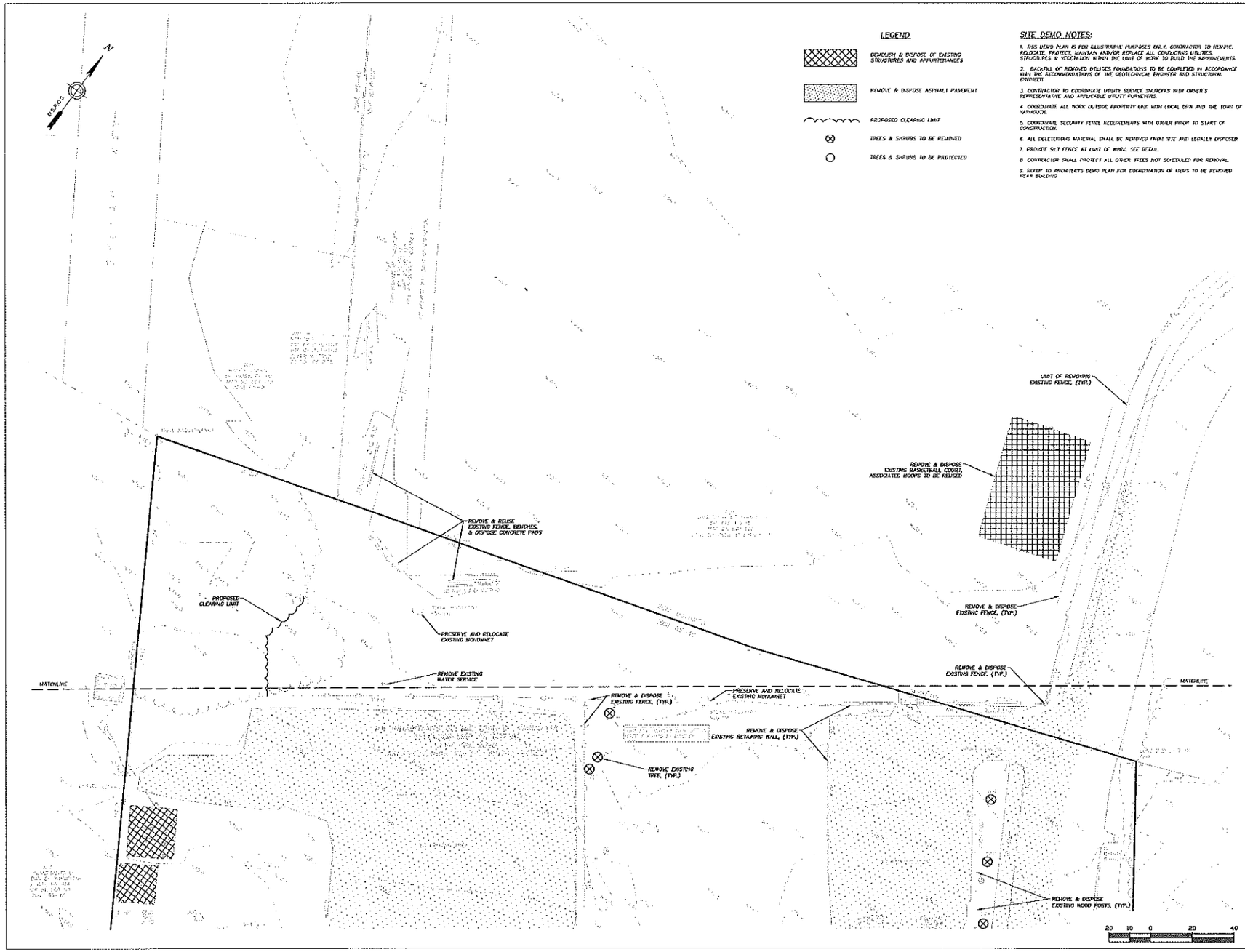
MARK	DATE	DESCRIPTION
1	08/25/10	CAPE COD COMMISSION SUBL

PROJECT NO.: 26-130
DRAWN BY: BPG/SZ
CHECKED BY: KK

SHEET TITLE

DEMOLITION PLAN

C-104



LEGEND

- REMOVE & DISPOSE OF EXISTING STRUCTURES AND APPURTENANCES
- REMOVE & DISPOSE ASPHALT PAVEMENT
- PROPOSED CLEARING LIMIT
- TREES & SHRUBS TO BE REMOVED
- TREES & SHRUBS TO BE PROTECTED

SITE DEMO NOTES:

1. THIS DEMO PLAN IS FOR ILLUSTRATIVE PURPOSES ONLY. CONTRACTOR TO REMOVE, RELOCATE, PROTECT, MAINTAIN AND/OR REPLACE ALL CONFLICTING UTILITIES, STRUCTURES & VEGETATION WITHIN THE LIMIT OF WORK TO BUILD THE IMPROVEMENTS.
2. BACKFILL OF REMOVED UTILITIES FOUNDATIONS TO BE COMPLETED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER AND STRUCTURAL ENGINEER.
3. CONTRACTOR TO COORDINATE UTILITY SERVICE DISCONNECTS WITH OWNER'S REPRESENTATIVE AND APPLICABLE UTILITY PURVEYORS.
4. COORDINATE ALL WORK OUTSIDE PROPERTY LINE WITH LOCAL DPW AND THE TOWN OF YARMOUTH.
5. COORDINATE SECURITY FENCE REQUIREMENTS WITH OWNER PRIOR TO START OF CONSTRUCTION.
6. ALL DELETERIOUS MATERIAL SHALL BE REMOVED FROM SITE AND LEGALLY DISPOSED.
7. PROVIDE SILT FENCE AT LIMIT OF WORK. SEE DETAIL.
8. CONTRACTOR SHALL PROTECT ALL OTHER TREES NOT SCHEDULED FOR REMOVAL.
9. REFER TO ARCHITECTS DEMO PLAN FOR COORDINATION OF ITEMS TO BE REMOVED NEAR BUILDING.

The Simpkins School Residences

Yarmouth, MA

Stratford Capital Group

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ENGINEERS AND SCIENTISTS
781-982-5400
Fax: 781-982-5490
101 Accord Park Drive
Norwell, MA 02061

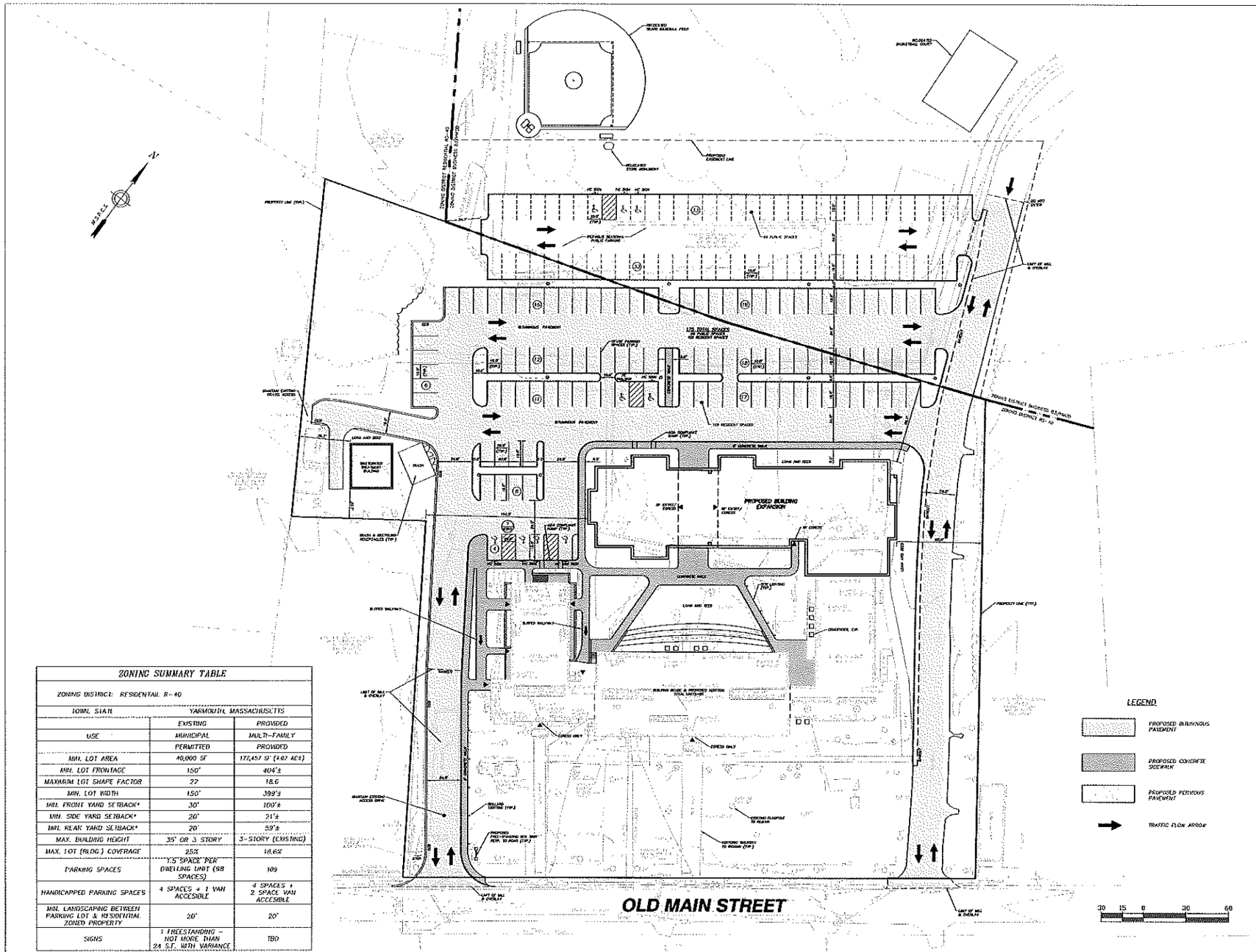
MARK	DATE	DESCRIPTION
1	08/25/10	CAPE COD COMMISSION SUB.

PROJECT NO.: 26-130
DRAWN BY: BPG/SZ
CHECKED BY: KK

SHEET TITLE

DEMOLITION PLAN

C-105



ZONING SUMMARY TABLE		
ZONING DISTRICT: RESIDENTAIL R-40		
TOWN, STATE	YARMOUTH, MASSACHUSETTS	
	EXISTING	PROVIDED
USE	MUNICIPAL	MULTI-FAMILY
	PERMITTED	PROVIDED
MIN. LOT AREA	40,000 SF	177,457 SF (4.07 AC±)
MIN. LOT FRONTAGE	150'	404'±
MAXIMUM LOT SHAPE FACTOR	22	18.6
MIN. LOT WIDTH	150'	399'±
MIN. FRONT YARD SETBACK*	30'	100'±
MIN. SIDE YARD SETBACK*	20'	21'±
MIN. REAR YARD SETBACK*	20'	59'±
MAX. BUILDING HEIGHT	35' OR 3 STORY	3-STORY (EXISTING)
MAX. LOT (BLDG.) COVERAGE	25%	18.6%
PARKING SPACES	1.5 SPACE PER DWELLING UNIT (98 SPACES)	109
HANDICAPPED PARKING SPACES	4 SPACES + 1 VAN ACCESIBLE	4 SPACES + 2 SPACE VAN ACCESIBLE
MIN. LANDSCAPING BETWEEN PARKING LOT & RESIDENTIAL ZONED PROPERTY	20'	20'
SIGNS	1 FREESTANDING – NOT MORE THAN 24 S.F. WITH VARIANCE	TBD

*SETBACKS APPLY TO ACCESSORY STRUCTURES ALSO

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MASSACHUSETTS
KELLY KOLLER
CIVIL
No. 38261
REGISTERED PROFESSIONAL ENGINEER
8-25-10

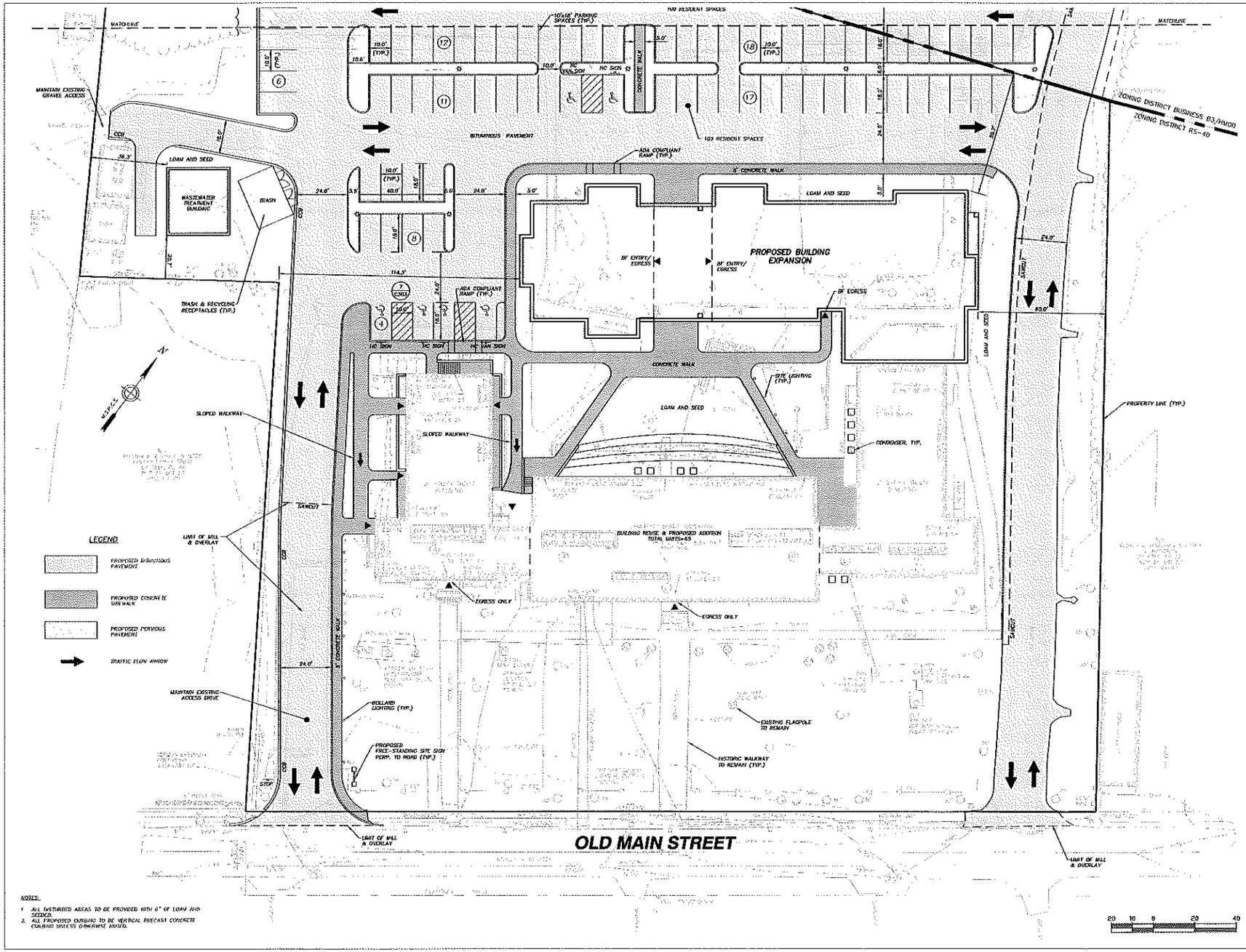
MARK	DATE	DESCRIPTION
1	08/25/10	CAPE COD COMMISSION SUB.

PROJECT NO.: 26-130
DRAWN BY: BPG/SZ
CHECKED BY: KK

SHEET TITLE

OVERALL LAYOUT PLAN

C-200



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COMMONWEALTH OF MASSACHUSETTS
WILLY FULLEN CHUK
No. 37570
REGISTERED PROFESSIONAL ENGINEER
8-25-10

MARK	DATE	DESCRIPTION
1	08/25/10	CAPE COD COMMISSION SUB.

PROJECT NO.: 26-130
DRAWN BY: BPG/SZ
CHECKED BY: KK

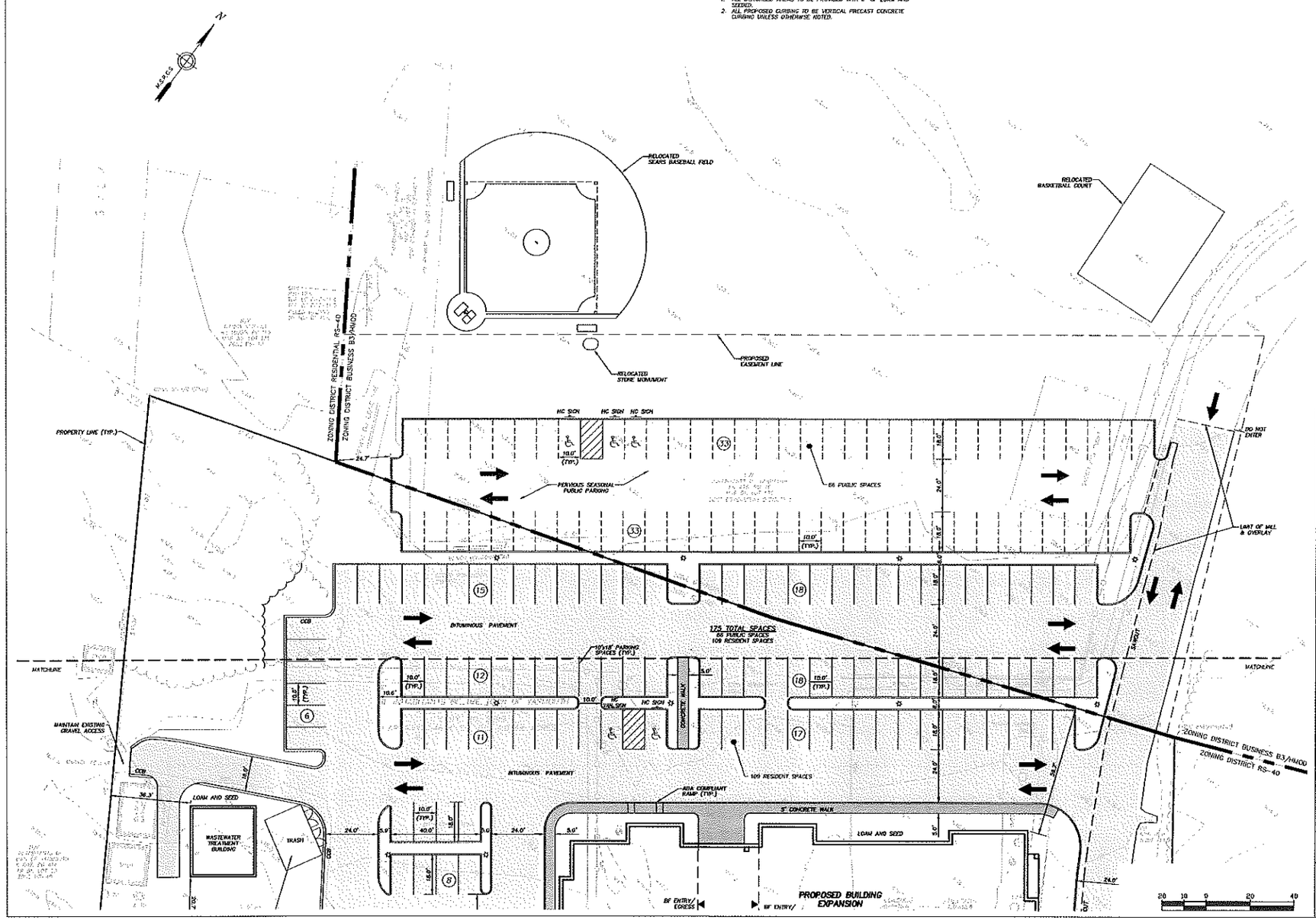
SHEET TITLE

LAYOUT PLAN

C-201

NOTES:

1. ALL DISTURBED AREAS TO BE PROVIDED WITH 6" OF LOAM AND SEEDED.
2. ALL PROPOSED CURBING TO BE VERTICAL PRECAST CONCRETE CURBING UNLESS OTHERWISE NOTED.



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COMMONWEALTH OF MASSACHUSETTS
BRIAN P. FALLON
No. 36931
PROFESSIONAL ENGINEER
8-25-10

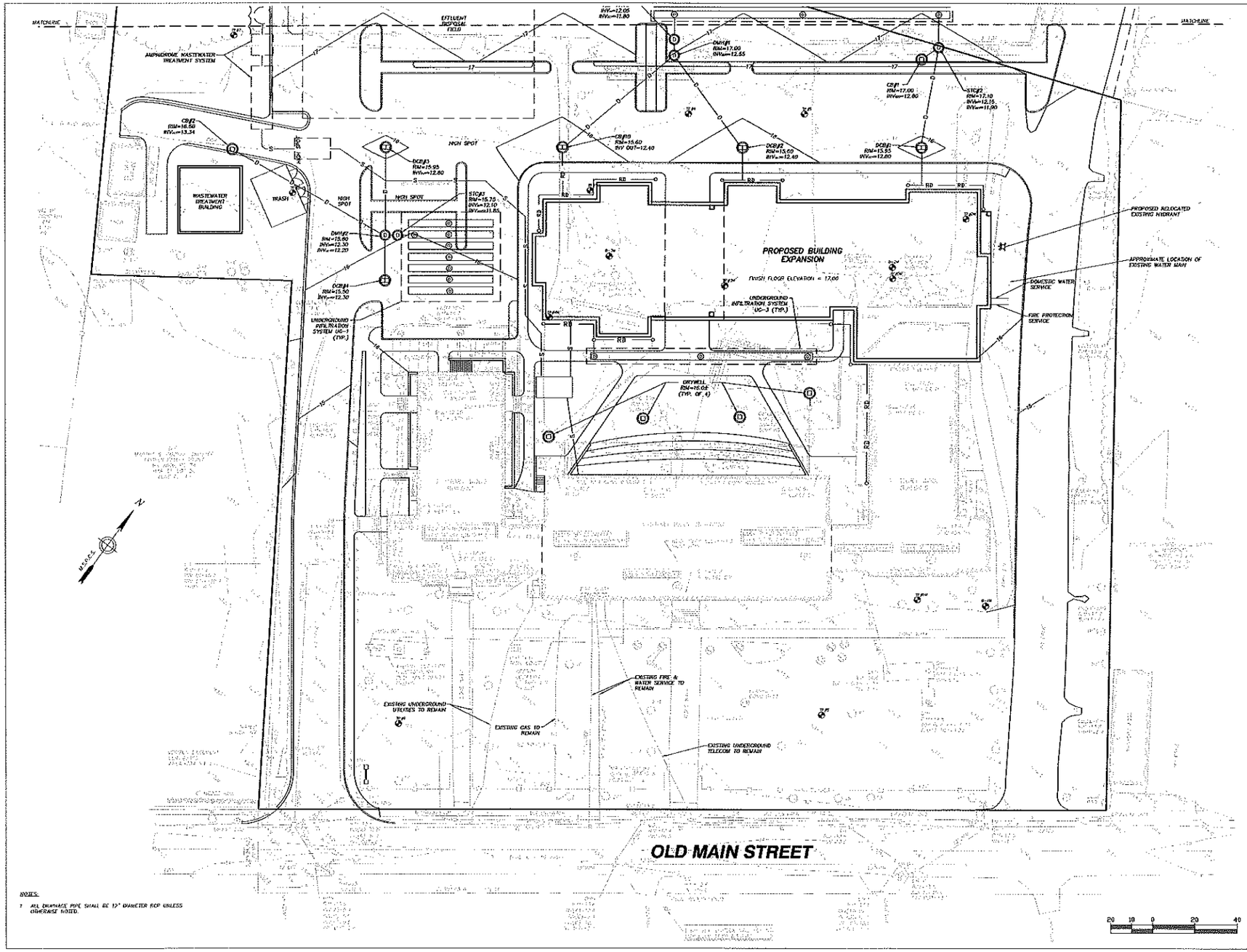
MARK	DATE	DESCRIPTION
1	08/25/10	CAPE COD COMMISSION SUB.

PROJECT NO.: 26-130
DRAWN BY: BPG/SZ
CHECKED BY: KK

SHEET TITLE

LAYOUT PLAN

C-202



NOTES:

1. ALL DRAINAGE PIPE SHALL BE 12" DIAMETER RCP UNLESS OTHERWISE NOTED.

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MARK	DATE	DESCRIPTION
1	08/25/10	CAPE COD COMMISSION SUB.

PROJECT NO.: 26-130
DRAWN BY: BPG/SZ
CHECKED BY: KK

SHEET TITLE

GRADING & UTILITY

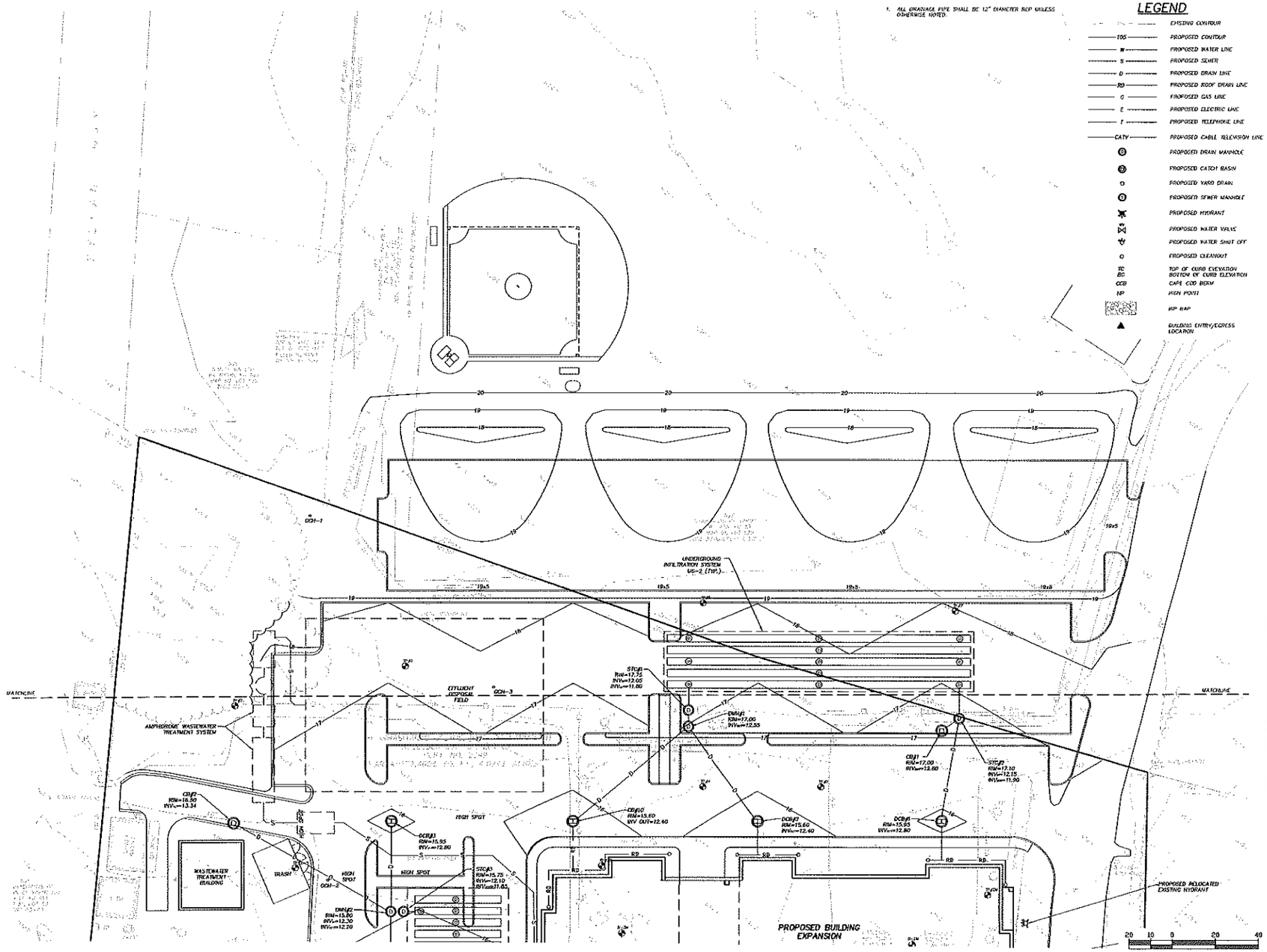
C-203

NOTES:

1. ALL DRAINAGE PIPE SHALL BE 12" DIAMETER RCP UNLESS OTHERWISE NOTED.

LEGEND

	EXISTING CONTOUR
105	PROPOSED CONTOUR
W	PROPOSED WATER LINE
S	PROPOSED SEWER
D	PROPOSED DRAIN LINE
RD	PROPOSED ROOF DRAIN LINE
G	PROPOSED GAS LINE
E	PROPOSED ELECTRIC LINE
T	PROPOSED TELEPHONE LINE
CATV	PROPOSED CABLE TELEVISION LINE
	PROPOSED DRAIN MANHOLE
	PROPOSED CATCH BASIN
	PROPOSED YARD DRAIN
	PROPOSED SEWER MANHOLE
	PROPOSED HYDRANT
	PROPOSED WATER VALVE
	PROPOSED WATER SHUT OFF
	PROPOSED CLEANOUT
TC / BC	TOP OF CURB ELEVATION / BOTTOM OF CURB ELEVATION
CCB	CAPE COD BERM
HP	HIGH POINT
	WP MAP
	BUILDING ENTRY/EGRESS LOCATION



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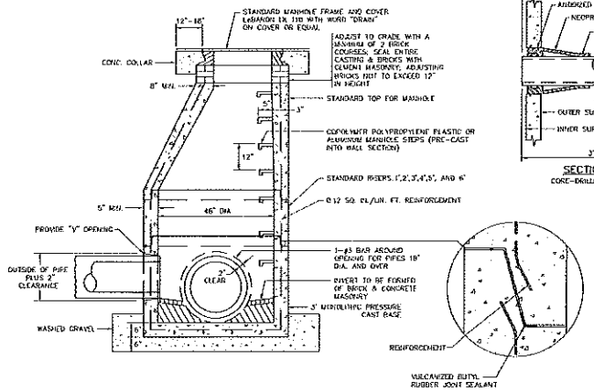
MARK	DATE	DESCRIPTION
1	08/25/10	CAPE COD COMMISSION SUB.

PROJECT NO.: 26-130
DRAWN BY: BPG/SZ
CHECKED BY: KK

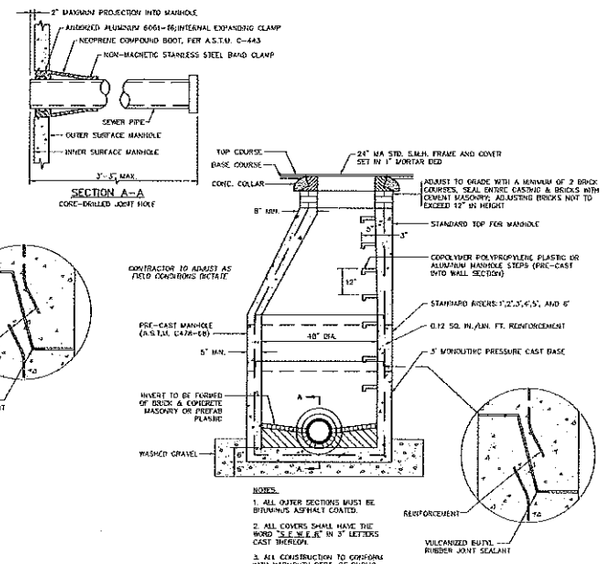
SHEET TITLE

GRADING & UTILITY

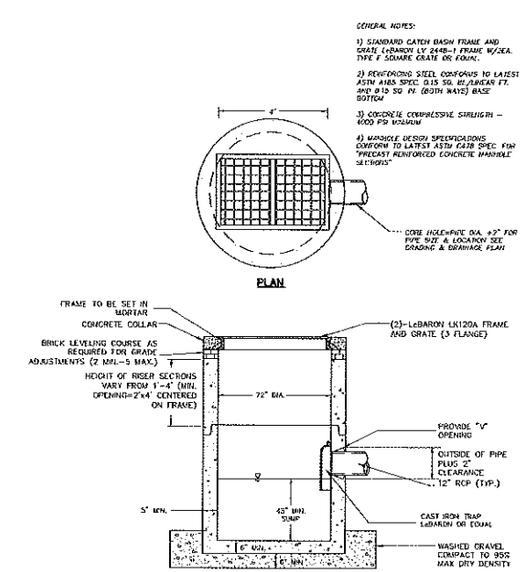
C-204



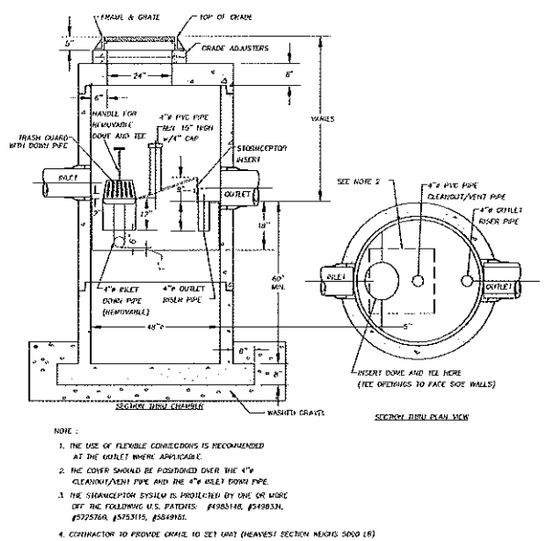
1 C300 STANDARD PRE-CAST DRAIN MANHOLE
NOT TO SCALE



2 C300 STANDARD PRE-CAST SEWER MANHOLE
NOT TO SCALE

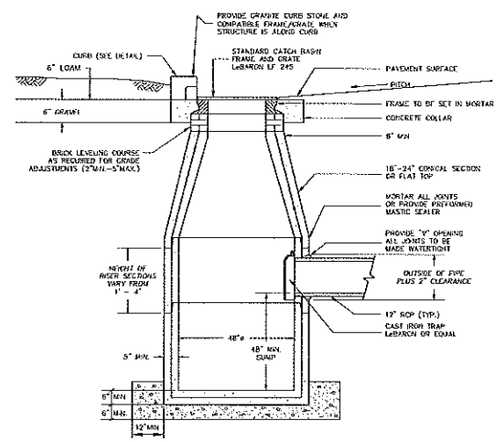


3 C300 DOUBLE GRATE CATCH BASIN
NOT TO SCALE

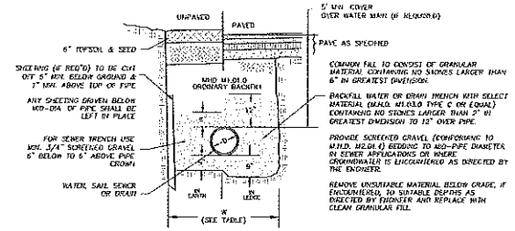


NOTE:
1. THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE OUTLET WHERE APPLICABLE.
2. THE COVER SHOULD BE POSITIONED OVER THE 4"ø CLEANOUT/VENT PIPE AND THE 4"ø INLET DOWN PIPE.
3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849161.
4. CONTRACTOR TO PROVIDE CRANE TO SET UNIT (HEAVIEST SECTION WEIGHS 5000 LB)

4 C300 STC 450i PRECAST CONCRETE STORMCEPTOR® OR EQUAL
NOT TO SCALE



5 C300 PRECAST CONCRETE CATCH BASIN
NOT TO SCALE



TRENCH WIDTH, W		
D DIAMETER OF PIPE	W UNSHEETED	W SHEETED
10-12"	3'	4'
14"-18"	3.5'	4.5'
20"-30"	4'	5'

NOTES:
1. ALL TRENCH CONSTRUCTION TO CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.
2. COMPACT FILL AND TAMP PER M 93% MAX DRY DENSITY IN 6" LIFTS UNLESS OTHERWISE SPECIFIED.
3. INSTALL DUCTILE IRON WATER PIPE IN ACCORDANCE WITH AWD A21.51 (AWWA C151) LAYING CONDITION TYPE 2. BACKFILL TO CONFORM TO MID M1.03.0 GRAVEL BORROW TYPE c (2" MINUS) TO 12" ABOVE PIPE CROWN OR AS DIRECTED BY MANUFACTURER OR ENGINEER.
4. MATERIALS FOR SEWER BEDDING, HAUNCHING, AND BACKFILL TO CONFORM TO CLASSES I, II, OR III AS DESCRIBED IN ASTM D 2321 AND TR-16 GUIDE'S FOR THE DESIGN OF WASTEWATER TREATMENT WORKS.
5. BACKFILL RCP CLASS 5 ADS N-12 HDPE, AND/OR PVC DRAIN PIPE WITH MID M1.03.0 GRAVEL BORROW TYPE c TO 12" ABOVE PIPE CROWN OR AS DIRECTED BY MANUFACTURER OR ENGINEER.
6. PROVIDE MINIMUM 5 FT. COVER OVER WATER MAIN AS MEASURED FROM BOTTOM OF CURB LINE. ISOLATE WATERMAIN IN ACCORDANCE WITH M.H.D. SECTION 301. WATER SYSTEMS IN AREAS PRONE TO FROST ACTION AND/OR LESS THAN 5' MIN. COVER.

6 C300 TYPICAL TRENCH SECTION
NOT TO SCALE

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COMMONWEALTH OF MASSACHUSETTS
KELLY KUSEFSKI CIVIL No. 36091
REGISTERED PROFESSIONAL ENGINEER
8-26-10

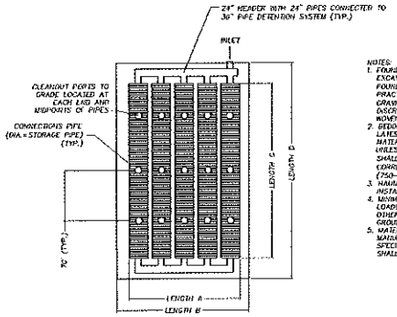
MARK	DATE	DESCRIPTION
1	08/25/10	CAPE COD COMMISSION SUB.

PROJECT NO.: 26-130
DRAWN BY: BPG/STZ
CHECKED BY: KK

SHEET TITLE

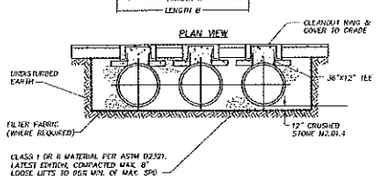
SITE DETAILS

C-300



PLAN VIEW

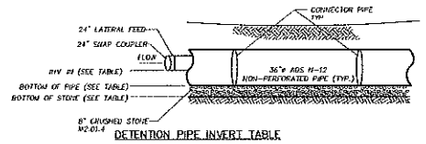
NOTES:
1. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I MATERIAL AS DEFINED BY ASTM D2321, "STANDARD PRACTICE FOR INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS" LATEST EDITION, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A NONTO GEOTEXTILE FABRIC.
2. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, AS REQUIRED IN ASTM D2321, LATEST EDITION. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION.
UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100-600mm) AND 42"-48" (1050-1200mm) CORRUGATED POLYETHYLENE PIPE (CPEP); 6" (150mm) FOR 30"-36" (750-900mm) CPEP.
3. HAUNCHING AND INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I AND INSTALLED AS REQUIRED BY ASTM D2321, LATEST EDITION.
4. MINIMUM COVER: MINIMUM RECOMMENDED DEPTHS OF COVER FOR VARIOUS LIVE LOADING CONDITIONS ARE SUMMARIZED IN THE FOLLOWING TABLE. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TAKEN FROM THE TOP OF PIPE TO GROUND SURFACE.
5. MATERIALS AND METHODS OF INSTALLATION SHALL COMPLY WITH ALL MANUFACTURES RECOMMENDATIONS AND SPECIFICATIONS. SHOULD THE SPECIFICATIONS DIFFER FROM WHAT IS SHOWN ON THE PLANS CONTRACTOR SHALL NOTIFY THIS FIRM IN WRITING OF ANY AFORE MENTIONED DISCREPANCIES.



* H1, H2 = 12" FOR UP TO AND INCLUDING 48" H-12
= 24" FOR 60" H-12
* FOR LIVE LOAD INSTALLATIONS PROVIDE 24" COVER FOR 42"-60" H-12

TYPICAL SUBSURFACE CROSS SECTION

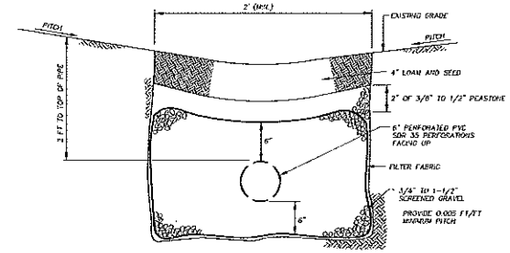
NOTE:
MANUFACTURER TO PROVIDE CERTIFICATION FOR THE SPACING AND BACKFILL REQUIRED FOR 36" ADS N-12 DETENTION SYSTEMS PRIOR TO INSTALLATION



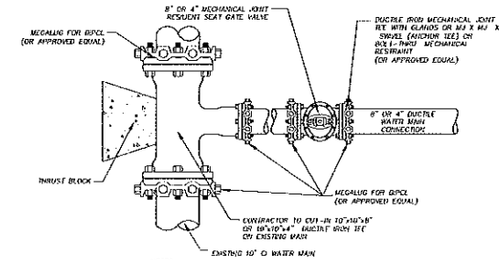
DETENTION PIPE INVERT TABLE

SYSTEM	PIPE D.A.	LENGTH A	LENGTH B	LENGTH C	LENGTH D	INV IN	INV OUT	ELEV. TOP OF PIPE	ELEV. BOTTOM OF PIPE	ELEV. TOP OF STONE	ELEV. BOTTOM OF STONE
UG-1	36"	35.5'	42.5'	40'	47'	14.0	N/A	11.5	10.5	14.0	8.5
UG-2	36"	25.0'	28'	140'	143'	13.0	N/A	15.0	12.0	15.5	11.0
UG-3	36"	3.5'	7.5'	105'	109'	11.5	N/A	13.5	10.5	14.0	9.5

1 / C301 UNDERGROUND INFILTRATION SYSTEM
NOT TO SCALE

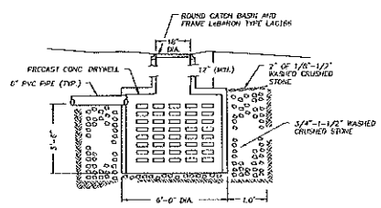


2 / C301 INFILTRATION TRENCH DETAIL
NO TO SCALE



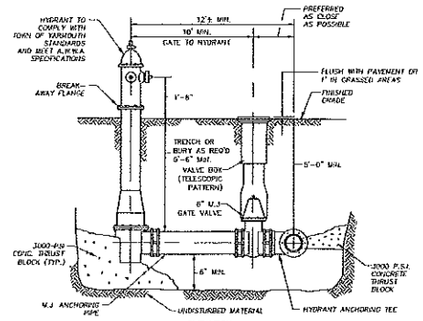
NOTES
1. ALL MATERIALS AND INSTALLATION PROCEDURES SHALL CONFORM TO TOWN OF YARMOUTH GUIDELINES, POLICIES AND SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. THE MECHANICAL JOINTS OF THE PIPES BETWEEN THE VALVES AND THE FITTINGS SHALL BE RESTRAINED VIA MEG-A-LUG JOINT CLAMPS (OR APPROVED EQUAL).

3 / C301 WATER CUT-IN TEE INSTALLATION
NO TO SCALE



NOTES:
1. LEACHING PIT TO WITHSTAND H-20 LOADING
2. 4000 PSI CONCRETE
3. 3/8" REBAR REINFORCING

4 / C301 PRECAST DRYWELL DETAIL
NO TO SCALE



ELEVATION

NOTE:
1. HYDRANT TO BE INSTALLED WITHIN RIGHT-OF-WAY OR AS SHOWN ON THE PLANS
2. ALL MATERIALS AND INSTALLATION TO CONFORM WITH TOWN OF YARMOUTH SPECIFICATIONS

5 / C301 TYPICAL HYDRANT AND VALVE DETAIL
NOT TO SCALE

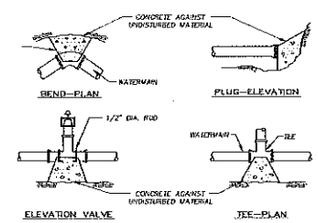


TABLE OF BEARING AREAS S.F.

SIZE OF BRANCH (IN)	TEES & PLUGS	VALVES	BENDS			
			90°	45°	22-1/2°	11-1/4°
4" & LESS	2	1	2	1	1	1
6"	3	2	3	2	2	2
8"	4	3	5	3	2	2
10" & 12"	9	4	10	6	4	3

NOTES
1. CONCRETE FOR THRUST BLOCKS SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
2. THRUST BLOCK BEARING AREAS TO BE IN ACCORDANCE WITH TABLE BELOW, UNLESS DETERMINED OTHERWISE BY THE ENGINEER BECAUSE OF SOIL CONDITIONS.

6 / C301 THRUST BLOCK DETAILS
NOT TO SCALE

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MARK	DATE	DESCRIPTION
1	06/25/10	CAPE COD COMMISSION SUB.

PROJECT NO.: 28-130
DRAWN BY: BPG/STZ
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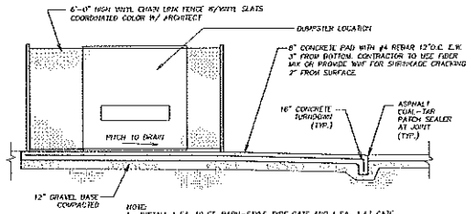
SHEET TITLE

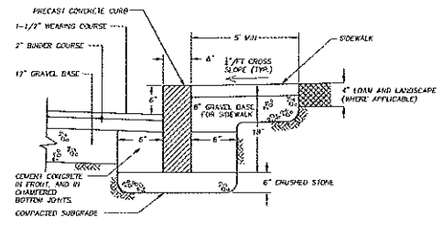
SITE DETAILS

C-301

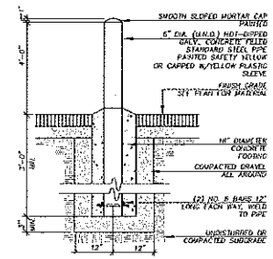


NOTE:
1. INSTALL 1 EA. 10 FT. WARN-STYLE TYPE GATE AND 1 EA. 3 FT GATE. SEE PLAN
2. COORDINATE FENCE AND SLAT COLOR WITH ARCHITECT.

1 / C302 DUMPSTER PAD SECTION
NOT TO SCALE

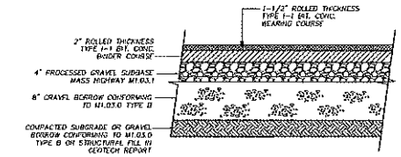


2 / C302 TYP. SECTION – CONCRETE CURB
NOT TO SCALE



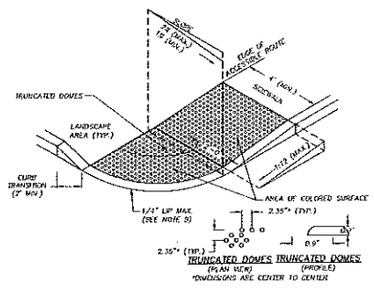
NOTE: BOLLARD TO BE INSTALLED 3 FT. FROM PROTECTED ELEMENT

3 / C302 TYPICAL BOLLARD DETAIL
NOT TO SCALE



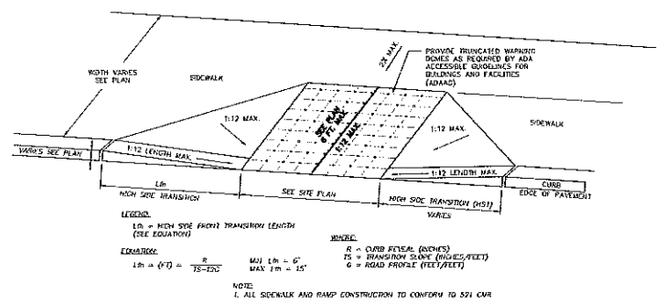
NOTE:
1 THIS PAVEMENT SECTION IS VALID FOR NEW CONSTRUCTION AS DENOTED ON PLANS.
2 COMPACTED LIFTS NOT TO EXCEED 8 INCHES BETWEEN COURSES

4 / C302 PAVEMENT SECTION
NOT TO SCALE



1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 2% (1:48 MIN.)
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 1:12
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TRFF WELLS, SIGNS, ETC.)
5. CURB TREATMENT VARIES. SEE PLANS FOR CURB TYPE.
6. RAMP, CURB, AND ADJACENT PAVEMENT SHALL BE GRADED TO PREVENT PONDING.
7. TYPICAL SIDEWALK SECTION FOR RAMP SECTION CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' X 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9 TERMINATE CURBING AT RAMP (EITHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABUTS ROADWAY.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES

5 / C302 CONCRETE CURB RAMP W/RETURNED & DEPRESSED GRANITE CURB
NOT TO SCALE



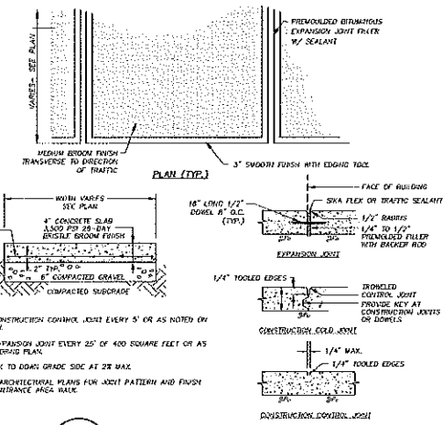
LEGEND:
Lh = HIGH SIDE FRONT TRANSITION LENGTH (SEE EQUATION)

EQUATION:
$Lh = (FT) = \frac{R}{TS-ERC}$ MIN. Lh = 6' MAX. Lh = 15'

WHERE:
R = CURB REVEAL (INCHES)
TS = TRANSITION SLOPE (INCHES/FEET)
G = ROAD PROFILE (FEET/FEET)

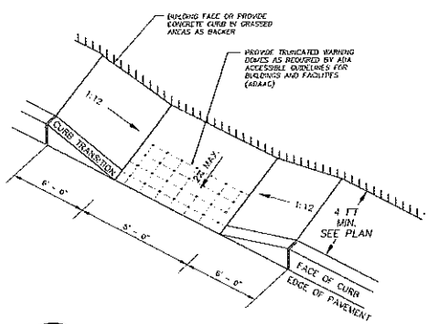
NOTE:
1. ALL SIDEWALK AND RAMP CONSTRUCTION TO CONFORM TO 521 CMR ARCHITECTURAL ACCESS BOARD AND APPLICABLE A.D.A. REGULATIONS.

6 / C302 CONCRETE WHEELCHAIR RAMP
NOT TO SCALE

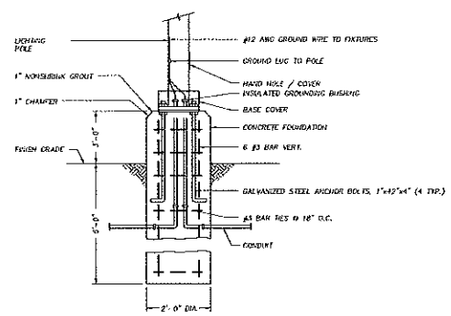


NOTES:
1. PROVIDE CONSTRUCTION CONTROL JOINT EVERY 5' OR AS NOTED ON SCORING PLAN.
2. PROVIDE EXPANSION JOINT EVERY 25' OF 400 SQUARE FEET OR AS NOTED ON SCORING PLAN.
3. PITCH WALK TO DOMES GRADE SIDE AT 2% MAX.
4. REFER TO ARCHITECTURAL PLANS FOR JOINT PATTERN AND FINISH SURFACE IN ENTRANCE AREA WALK.

7 / C302 CONCRETE SIDEWALK
NOT TO SCALE

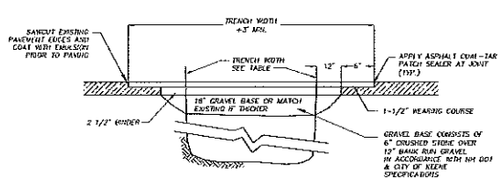


8 / C302 CONCRETE WHEELCHAIR RAMP TYPE A
NOT TO SCALE



NOTE:
ANCHOR BOLT PATTERN TO CONFORM TO LIGHT POLE BASE PATTERN SHOP DRAWING APPROVAL REQUIRED.

9 / C302 POLE BASE DETAIL
NOT TO SCALE



TRENCH WIDTH, W		
D DIAMETER OF PIPE	W UNSHEETED	W SHEETED
TO 12"	3'	4'
14" TO 24"	4'	5'
30" TO 36"	5'	6'

NOTES:
1. CONTRACTOR TO PROVIDE PAVEMENT PATCH TO MEET CITY OF NEEDHAM SPECIFICATIONS.
2. PAVEMENT TO BE MINIMUM 3" HOT MIX OR GREATER TO MATCH EXISTING.

10 / C302 PAVEMENT PATCH DETAIL FOR TRENCH SECTIONS
NOT TO SCALE

The Simpkins School Residences

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KELLY KEITH OYE
No. 48 REGISTERED PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS

6-25-10

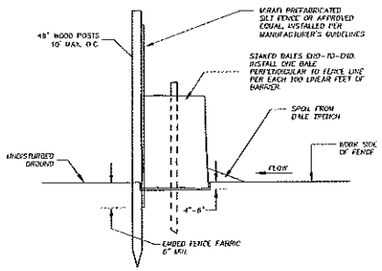
MARK	DATE	DESCRIPTION
1	06/25/10	CAPE COD COMMISSION SUB.

PROJECT NO.: 26-130
DRAWN BY: BPG/STZ
CHECKED BY: KK

SHEET TITLE

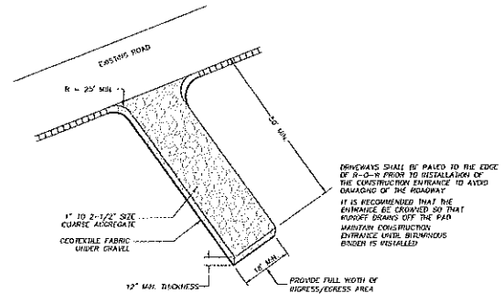
SITE DETAILS

C-302

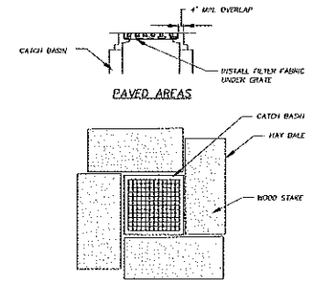


NOTES:
1. BALES TO BE TIED W/BIODEGRADABLE TWINE.
2. HAY BALES TO BE SECURED W/ MIN. TWO (2) 1"x1"x3' WOOD STAKES PER BALE, DRIVEN 12" MIN. INTO GRADE.

1 / C303 HAYBALE WITH SILTFENCE DETAIL
NOT TO SCALE

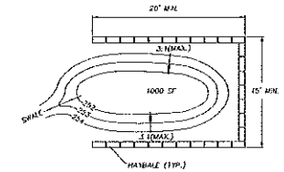


2 / C303 STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



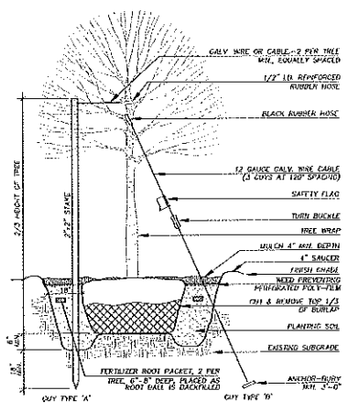
NOTES:
1. INSTALL INLET PROTECTION AT EACH CATCH BASIN AS REQUIRED.
2. IN AREAS OF THE RIGHT-OF-WAY CONTRACTOR TO INSTALL SILT SACK CATCH BASIN PROTECTION OR EQUAL.

3 / C303 CATCH BASIN PROTECTION
NOT TO SCALE



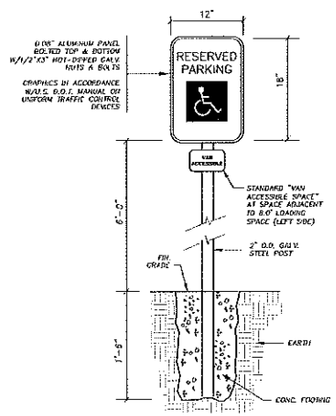
1. SEDIMENT TRAP SHALL BE SIZED IN ACCORDANCE WITH MASS. EROSION & SEDIMENT CONTROL GUIDELINES FOR URBAN & SUBURBAN AREAS
2. DRAINAGE AREA SHALL NOT BE MORE THAN 5 ACRES.
3. SEDIMENT TRAP SHOULD HAVE A MINIMUM VOLUME BASED ON 1/2 INCH OF STORAGE FOR EACH ACRE OF DRAINAGE AREA. THIS VOLUME EQUATES TO 1800 CUBIC FEET OF STORAGE OR 67 CUBIC YARDS FOR EACH ACRE OF DRAINAGE AREA.

4 / C303 TEMPORARY SEDIMENTATION BASIN
NOT TO SCALE



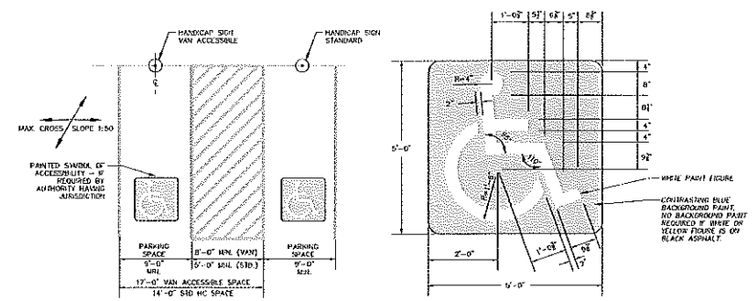
NOTE:
1. GUY TYPE "A" IS FOR TREES LESS THAN 3" CALIPER
GUY TYPE "B" IS FOR TREES 3" CALIPER OR GREATER

5 / C303 TYPICAL TREE PLANTING
NOT TO SCALE



NOTE: REINSTALL EXISTING SIGN AS NOTED ON PLAN. COORDINATE PLACEMENT WITH OWNER'S REPRESENTATIVE.

6 / C303 HANDICAPPED PARKING SIGN
NOT TO SCALE



A. SYMBOL TO BE CENTERED ON WIDTH OF PARKING STALL.
B. BOTTOM OF SYMBOL TO BE LOCATED 2'-6" FROM ACCESS DRIVE, INTO PARKING SPACE.
C. SYMBOL IS REQUIRED TO CONTRAST WITH BACKGROUND.

7 / C303 HANDICAP PARKING SPACE AND SYMBOL
NOT TO SCALE

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COMMONWEALTH OF MASSACHUSETTS
PROFESSIONAL ENGINEER
8-25-10

MARK	DATE	DESCRIPTION
1	08/25/10	CAPE COD COMMISSION SUB.

PROJECT NO.: 26-130
DRAWN BY: BPG/STZ
CHECKED BY: KK

SHEET TITLE

SITE DETAILS

C-303

GENERAL

1. PROTECTION

A. PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS, TREES OR VEGETATION.

B. PROTECT IMPROVEMENTS ON ADJOINING PROPERTIES AND ON OWNER'S PROPERTY

C. RESTORE DAMAGED IMPROVEMENTS TO ORIGINAL CONDITION AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.

D. CONDUCT OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADWAYS, STREETS, WALKS, AND OTHER ADJACENT FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION. STREETS AND ROADWAYS SHALL BE THOROUGHLY CLEANED AND/OR SWEPT ON A DAILY BASIS OR MORE FREQUENTLY AS REQUIRED BY THE GOVERNING AUTHORITY.

2. UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE MASSACHUSETTS HIGHWAY DEPARTMENT SPECIFICATIONS FOR HIGHWAYS AND BRIDGES AND/OR THE APPROPRIATE LOCAL AUTHORITIES

3. ALL SLOPES, UNLESS OTHERWISE SPECIFIED, SHALL BE LOAMED AND SEEDED FOR STABILIZATION AS SOON AS POSSIBLE TO PREVENT EROSION INTO WETLAND RESOURCE AREAS, ABUTTING PROPERTIES, OR PUBLIC WAYS. EROSION CONTROL BLANKETS OR TURF REINFORCEMENT MATS ARE REQUIRED FOR ALL 2H:1V SLOPES. SLOPES MAY NOT EXCEED 2H:1V. SEE "SEEDING" NOTE 3.

4. ANY DEVIATING, I.E. "FIELD CHANGES" FROM THE DESIGN PLAN(S) MUST BE APPROVED BY THE DESIGN ENGINEER IN WRITING. CONTRACTOR SHOULD BE AWARE THAT LOCAL AND STATE AUTHORITIES HAVE JURISDICTION AND APPROVALS MUST BE OBTAINED FROM THE APPROPRIATE AUTHORITY PRIOR TO THE IMPLEMENTATION OF THE "FIELD CHANGE". CIVIL & COLANTONIO, INC. ASSUMES NO LIABILITY OR RESPONSIBILITY FOR WORK ASSOCIATED WITH FIELD CHANGES COMPLETED WITHOUT REGARD TO THE "FIELD CHANGE" PROCEDURE.

5. REFER TO THE SURVEY GENERAL NOTES ON EXISTING CONDITIONS PLAN OF THIS SET FOR EXISTING CONDITIONS NOTES AND SURVEY RELATED REFERENCES.

6. RELOCATION OF ANY UTILITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF THE APPROPRIATE UTILITY COMPANY AND/OR REGULATORY AGENCY.

7. * * * ONE SAFE NOTE * * *
IN ACCORDANCE WITH MGL CH 82, SEC. 40 INCLUDING AMENDMENTS, ALL CONTRACTORS SHALL NOTIFY UTILITY COMPANIES AND GOVERNMENT AGENCIES IN WRITING, OF THE INTENT TO EXCAVATE, BLAST, DEMOLISH, BORE, OR PERFORM OTHER EARTH MOVING OPERATIONS NO LESS THAN 72 HOURS AND NO MORE THAN 30 DAYS PRIOR TO THE COMMENCEMENT OF SUCH WORK (EXCLUSIVE OF SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS) OR CALL "DIG SAFE" AT 1-888-DIG-SAFE.

8. LOCATION OF UNDERGROUND UTILITIES ON THIS PLAN ARE APPROXIMATE ONLY AND ARE BASED ON ACTUAL FIELD LOCATIONS OF VISIBLE STRUCTURES AND PLAN COMPILATIONS. EXISTING UTILITY LOCATIONS AND ELEVATIONS SHOWN SHALL BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. TEST PITS SHALL BE PERFORMED BY CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL INFORM THE DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF ANY CONSTRUCTION.

9. USE OF EXPLOSIVES

A. COMPLY WITH ALL LAWS, RULES AND REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES AND AGENCIES WHICH GOVERN STORAGE, USE, MANUFACTURE, SALE, HANDLING, TRANSPORTATION, LICENSING, OR OTHER INSPECTION OF EXPLOSIVES. UTILIZE SPECIAL PRECAUTIONS FOR PROPER USE OF EXPLOSIVES TO PREVENT HARM TO HUMAN LIFE AND DAMAGE TO SURFACE STRUCTURES, ALL UTILITY LINES OR OTHER SUBSURFACE STRUCTURES DO NOT CONDUCT BLASTING OPERATIONS WHEN PERSONS IN VICINITY MAKE HAS AMPLE WARNING AND HAVE REASONABLE POSSIBILITY OF SAFETY.

B. BLASTING OF ANY ROCK SHALL REQUIRE APPROPRIATE APPROVALS FROM THE LOCAL FIRE DEPARTMENT, PLANNING BOARD, BUILDING INSPECTOR AND OTHER PERTINENT AGENCIES, PRIOR TO COMMENCEMENT OF WORK. ALL BLASTED ROCK OR OTHER EXCESS MATERIALS MUST BE REMOVED FROM THE SITE AND DISPOSED OF AT THE EXPENSE OF THE CONTRACTOR.

10. ADDITIONAL BENCHMARKS TO BE SET BY CONTRACTOR PRIOR TO CONSTRUCTION TO ENSURE QUALITY WORKMANSHIP

11. THE PLANS CONTAINED HEREIN SHALL SUPERSEDE ANY AND ALL PREVIOUS DESIGN PREPARED FOR THE SUBJECT SITE. THE CONTRACTOR SHALL REVIEW ALL PLANS AND SPECIFICATIONS AND NOTIFY ENGINEER IMMEDIATELY OF ANY CONFLICTS OR DISCREPANCIES IN THE WORK. FAILURE TO DO SO DURING CONTRACT DOCUMENT REVIEW PERIOD WILL INDICATE ANY CLAIM DURING CONSTRUCTION FOR EXTRA TIME TO COMPLETE THE WORK.

12. ANY SPLASH AND/OR DETENTION BASINS SHOULD RECEIVE PERIODIC MAINTENANCE DURING CONSTRUCTION TO REMOVE DEPOSITED SILTS AND DEBRIS TO ENSURE PROPERTY DRAINAGE AND SETTLING BY PARTICULATE MATTER.

13. ALL MANHOLE COVERS FOR CROSS-COUNTRY LOCATIONS OR IN PUBLIC GATHERING SHALL BE FITTED WITH BOLT LOCKS OR EQUIVALENT.

14. UNLESS OTHERWISE LABELED, ALL REINFORCED CONCRETE PIPE, RCP, SHALL BE CLASS V. ALL DUCTILE IRON PIPE SHALL BE CEMENT LINED CLASS 52. ALL PVC SEWER SHALL BE SDR 35. ALL CORRUGATED PLASTIC PIPE SHALL BE DOUBLE WALLED N-12 AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS OR APPROVED EQUAL.

SEQUENCE OF CONSTRUCTION

1. CONTRACTOR MUST PROCEED WITH CONSTRUCTION ACCORDING TO THE CONDITIONS ESTABLISHED BY THE LOCAL ZONING BOARD, LOCAL CONSERVATION COMMISSION, AND ANY APPLICABLE ENVIRONMENTAL PERMITS INCLUDING BUT NOT LIMITED TO NPDES, ACOE, 401, NOI WATER QUALITY CERTIFICATE. INDEXES OF CONDITIONS, CONDITIONS OF SPECIAL PERMIT, AND GENERAL WATER RESOURCE PERMIT. COMPLIANCE WITH THESE PERMITS SHALL BE A REQUIREMENT OF THE CONSTRUCTION BID AND SHALL BE REFERENCED IN ANY AGREEMENTS BETWEEN THE OWNER AND CONTRACTOR. THE CONTRACTOR MUST OBTAIN A COPY OF THE PERMITS PRIOR TO BIDDING.

2. A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR, OWNER'S REPRESENTATIVE, AND THE BUILDING IS REQUIRED.

3. ALL EROSION AND SEDIMENTATION CONTROL MEASURES MUST BE IN PLACE PRIOR TO CONSTRUCTION. MAINTAIN AND CLEAN TEMPORARY EROSION CONTROL DEVICES DURING CONSTRUCTION AS NECESSARY. INSPECT CHECK DAMS AND SILT FENCING DAILY. DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. PROVIDE MEASURES AS NECESSARY TO PREVENT SOIL FROM ENTERING OUTSIDE LIMIT OF WORK.

4. REMOVE EXISTING BUILDINGS AND RELATED APPURTENANCES AS INDICATED ON THE PLANS. REMOVE DEBRIS FROM THE SITE TO PREVENT MATERIAL FROM ENTERING RESOURCE AREAS OR ABUTTING PROPERTIES.

5. CONTRACTOR TO ABANDON EXISTING WELLS AND SEPTICS ON THE SITE IN ACCORDANCE WITH LOCAL BOARD OF HEALTH PROCEDURES.

6. ESTABLISH AREAS DESIGNATED FOR REVEGETATION. AERATE AND DECOMPACT SOIL IN PREPARATION FOR PLANTING. PROTECT PLANTED AREAS DURING CONSTRUCTION.

7. CLEAR, GRUB AND GRADE THE SITE AS SHOWN ON THE PLANS. PROVIDE PERMANENT VEGETATIVE COVER AND STABILIZATION IN AREAS WHERE NO FURTHER CONSTRUCTION IS PROPOSED. PROVIDE TEMPORARY EROSION PROTECTION IN AREAS SCHEDULED FOR FUTURE EXCAVATION. STOCKPILE SOIL AWAY FROM ENVIRONMENTALLY SENSITIVE AREAS AND DRAINAGE WAYS. STABILIZE DORMANT STOCKPILES UNTIL ACTIVE USE IS RESUMED.

8. BEGIN CONSTRUCTION OF THE PROPOSED UTILITIES AND RELOCATION OF EXISTING UTILITIES. REMOVE CONSTRUCTION MATERIALS UPON COMPLETION OF WORK EACH DAY. DO NOT STORE CHEMICALS OR FUELS IN RESOURCE AREA BUFFERS OR NEAR PRIVATE WELLS. HAZARDOUS MATERIALS MUST BE SECURED ACCORDING TO ALL FEDERAL, STATE, AND LOCAL REGULATIONS. CONTRACTOR ENCOURAGED TO OBTAIN PHASE I ENVIRONMENTAL ASSESSMENT FROM OWNER.

9. STABILIZE ALL SLOPES AND RESTORE VEGETATION DISTURBED DURING CONSTRUCTION. PROTECT GRADED AREAS WITH SEEDED MULCH OR EROSION CONTROL BLANKETS AS REQUIRED. REMOVE SEDIMENTATION CONTROLS WHEN A GOOD VEGETATIVE COVER IS ESTABLISHED.

SITE WORK

1) CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS (EXCLUSIVE OF SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS) PRIOR TO ANY EXCAVATION, BLASTING, DEMOLISH, BORING, OR OTHER EARTH MOVING OPERATIONS TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS AT NO ADDITIONAL EXPENSE TO OWNER.

2.) FILL MATERIAL

A.) ENSURE THAT AREAS TO BE FILLED ARE FREE OF STANDING WATER, FROST, FROZEN MATERIAL, DEBRIS, AND DEBRIS PRIOR TO FILL PLACEMENT.

B.) PLACE APPROPRIATE FILL MATERIAL AS DESIGNATED BY THE GEOTECHNICAL ENGINEER IN HORIZONTAL LAYERS NOT EXCEEDING EIGHT INCHES (8") IN LOOSE DEPTH AND COMPACT EACH LAYER AT OPTIMUM MOISTURE CONTENT OF FILL MATERIAL TO DENSITY EQUAL TO ORIGINAL ADJACENT GROUNDS, UNLESS SUBSEQUENT EXCAVATION FOR NEW WORK IS REQUIRED.

3.) FINISH GRADING

A.) GRADE ALL AREAS WHERE FINISH GRADE ELEVATIONS ARE INDICATED ON DRAWINGS, OTHER THAN PAVED AREAS AND BUILDINGS, INCLUDING EXCAVATED AREAS, FILLED AND TRANSITION AREAS, AND LANDSCAPED AREAS. GRADED AREAS SHALL BE UNIFORM AND SMOOTH, FREE FROM DEBRIS OR IRREGULAR SURFACE CHANGES. FINISHED SUBGRADE SURFACE SHALL NOT BE MORE THAN 0.10 FEET ABOVE OR BELOW ESTABLISHED SUBGRADE ELEVATIONS, AND ALL GROUND SURFACES SHALL VARY UNIFORMLY BETWEEN INDICATED ELEVATIONS. FINISH DITCHES SHALL BE GRADED TO ALLOW FOR PROPER DRAINAGE WITHOUT PONDING AND IN A MANNER THAT WILL MINIMIZE EROSION POTENTIAL.

B.) GRADE SURFACE TO MATCH ADJACENT GRADES AND TO PROVIDE FLOW TO SURFACE DRAINAGE STRUCTURES, OR GRADE AS DESIGNATED ON THE PLANS AFTER FILL PLACEMENT AND COMPACTION

4.) THE CONTRACTOR IS RESPONSIBLE FOR GENERAL CLEANUP OF THE PROJECT ON A DAILY BASIS AND AT THE COMPLETION OF THE PROJECT. OPEN TRENCHES, DITCHES, EXCAVATIONS, ETC. SHALL NOT BE PERMITTED TO BE LEFT OPEN OVERNIGHT. CONTRACTOR WILL BACKFILL OR UTILIZE SUITABLE STEEL PLATES FOR THE SECURING OF THE PROJECT SITE PRIOR TO CLOSING WORK EACH DAY.

5.) APPROPRIATE TRAFFIC CONTROL, I.E. SIGNAGE, BARRICADES, AND OTHER MEANS, WILL BE SUPPLIED BY THE CONTRACTOR IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL AGENCIES.

6.) UNDER NO CIRCUMSTANCES MAY ANY UTILITY, STRUCTURE, AND/OR REPAIR BE BACKFILLED UNLESS INSPECTED AND APPROVED BY THE CITY OFFICIALS AND/OR REPRESENTATIVE RECEIPT OF APPROVAL DO SHOULD NOT RELEASE THE CONTRACTOR FROM ANY RESPONSIBILITY OR LIABILITY FOR PERFORMANCE TESTS REQUIRED AS PART OF THIS PROJECT.

7.) PROPER SHORING AND TRENCH BOXES SHALL BE UTILIZED AS REQUIRED BY LOCAL, STATE, AND FEDERAL REGULATORY AGENCIES TO PROVIDE A SAFE WORKING ENVIRONMENT. SHORING SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MASSACHUSETTS WITH EXPERIENCE IN SHORING DESIGN.

8.) ALL UTILITIES DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

9.) WATER

A.) ALL WATER PIPING, VALVES, HYDRANTS, AND FITTINGS ETC. TO CONFORM TO LOCAL GUIDELINES OR AS DIRECTED BY THE WATER DEPARTMENT. CONSTRUCTION OF WATER LINE TO CONFORM TO ALL LOCAL AND STATE AGENCIES HAVING JURISDICTION.

B.) ALL WATER PIPE SHALL BE SEAMLESS CLASS 52 DUCTILE IRON. ALL PIPES AND FITTINGS SHALL HAVE A CEMENT LINING OVER THE THICKNESS SPECIFIED IN ANSI C104 AND SHALL HAVE A BITUMINOUS SEAL COAT APPLIED INSIDE AND OUTSIDE CONFORMING TO ANSI C104. "TYTON" OR MECHANICAL JOINTS ARE PERMITTED UNLESS OTHERWISE DIRECTED.

C.) REFER TO PLUMBING PLANS FOR WATER SERVICE, FIRE PROTECTION, AND SANITARY SEWER CONNECTIONS UNLESS OTHERWISE NOTED.

SEWER NOTES

1.) THESE NOTES ARE INTENDED TO SUPPLEMENT THE LOCAL REQUIREMENTS FOR MATERIALS AND WORKMANSHIP.

2.) WATER AND SEWER MAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST LOCAL AND STATE CODES INCLUDING THE RECOMMENDATIONS OF THE AMERICAN WATER WORKS ASSOCIATION AND THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION TECHNICAL REPORT 16. CONSTRUCTION SHALL PROCEED IN A WORKMANLIKE MANNER WITH STATE-OF-THE-ART CONSTRUCTION TECHNIQUES.

3.) THE CONTRACTOR SHALL INSTALL WALLS AND TRENCHES AS INDICATED ON THE PLANS OR WHEN DESIGN OR CONSTRUCTION CIRCUMSTANCES DICTATE ADDITIONAL TO OCCUR ABOVE THE FROST LINE. PROCUREMENT AND INSTALLATION OF PIPE INSULATION SHALL CONFORM TO THE REQUIREMENTS LISTED IN THE LATEST MASS. HIGHWAY STANDARD SPECIFICATIONS FOR SECTION 301.639 AND MATERIAL SPECIFICATION M91.11.1. THE PIPE INSULATION SHALL BE PRE-MOLDED TYPE CELLULAR GLASS INSULATION WITH ALUMINUM JACKET CONFORMING TO THE LATEST REQUIREMENTS OF ASTM-523 OR APPROVED EQUAL.

4.) THE CONTRACTOR SHALL FOLLOW ALTERNATE CONSTRUCTION PROCEDURES WHEN DESIGN OR CONSTRUCTION CIRCUMSTANCES PREVENT HORIZONTAL SEPARATION OF 10 FEET OR THE ALTERNATE OF 18 INCHES OF VERTICAL SEPARATION BETWEEN WATER AND SEWER MAINS. IN AREAS WHERE THE ABOVE OFFSETS CANNOT BE MAINTAINED, THE WATER MAIN SHALL BE CONSTRUCTED WITH MECHANICAL TYPE FITTINGS OR APPROVED EQUAL FOR A DISTANCE OF 10-FEET ON EITHER SIDE OF THE CROSSING OR LATERAL ENCIRCUMSTANCES AND SHALL STANDARD A FULL LENGTH OF CLASS 52 CEMENTED LINED DUCTILE IRON WATER PIPE.

5.) THE DEFLECTION IN ALL GRAVITY SEWER PIPE SHALL BE TESTED USING A GO, NO-GO MANDREL TEST TO ENSURE THAT PROPER INSTALLATION HAS OCCURRED. TEST SHALL CONFORM WITH PIPE MANUFACTURER'S RECOMMENDATION AND SHALL NOT EXCEED MORE THAN 7.5% DEFLECTION, 11.0%.

6.) EACH SEGMENT OF THE SEWER MAIN INCLUDING MANHOLES SHALL BE LEAK TESTED AND OBSERVED BY A REPRESENTATIVE OF THE TOWN AND/OR ENGINEER IN ACCORDANCE WITH THE FOLLOWING PROCEDURES:

COMPACTION TEST:

1.) PREPARATION OF TEST. AFTER THE MANHOLE HAS BEEN ASSEMBLED IN PLACE, ALL LIFTING HOLES AND THOSE EXTERIOR JOINTS WITHIN SIX FEET OF THE GROUND SURFACE SHALL BE FILLED AND FOGGED WITH AN APPROVED NON-SHRINKING MORTAR. THE TEST SHALL BE MADE PRIOR TO PLACING THE GRAVEL AND MORTAR AND BEFORE PLACING AND POURING THE MONOLITHIC JOINTS BELOW THE 6-- FOOT DEPTH LIMIT IF THE GROUNDWATER TABLE HAS BEEN ALLOWED TO RISE ABOVE THE BOTTOM OF THE MANHOLE, IT SHALL BE LOWERED FOR THE DURATION OF THE TEST. ALL PIPES AND OTHER OPENINGS INTO THE MANHOLE SHALL BE SUITABLE PLUGGED AND PLUGS BRACED TO PREVENT BLOW OUT.

2.) TEST PROCEDURE. THE MANHOLE SHALL THEN BE FILLED WITH WATER TO THE TOP OF THE CONE SECTION. IF THE EXCAVATION HAS NOT BEEN BACKFILLED AND OBSERVATION INDICATED NO VISIBLE LEAKAGE, THAT IS, NO WATER VISIBLY MOVING DOWN THE SURFACE OF THE MANHOLE, THE MANHOLE MAY BE CONSIDERED TO BE SATISFACTORY WATERTIGHT. IF THE TEST AS DESCRIBED ABOVE IS UNSATISFACTORY AS REVIEWED BY THE ENGINEER OR IF THE MANHOLE EXCAVATION HAS BEEN BACKFILLED THE TEST SHALL BE CONTINUED. A PERIOD OF TIME MAY BE PERMITTED, IF THE CONTRACTOR WISHES, TO ALLOW FOR ABSORPTION.

3.) AT THE END OF THIS PERIOD, THE MANHOLE SHALL BE REFILLED TO THE TOP OF THE CONE, IF NECESSARY, AND THE MEASURING TIME OF AT LEAST EIGHT HOURS BEGUN. AT THE END OF THE TEST PERIOD, THE MANHOLE SHALL BE REFILLED TO THE TOP OF THE CONE, MEASURING THE VOLUME OF WATER ADDED. THIS AMOUNT SHALL BE EXTRAPOLATED TO A 24-HOUR RATE AND THE LEAKAGE DETERMINED ON THE BASIS OF EXCESS. THE LEAKAGE FOR EACH MANHOLE SHALL NOT EXCEED ONE GALLON PER VERTICAL FOOT FOR A 24-HOUR PERIOD. IF THE TEST FAILS THIS REQUIREMENTS, BY THE LEAKAGE EXCEEDS NOT EXCEED THREE GALLONS PER VERTICAL FOOT PER DAY, REPAIRS BY APPROVED METHODS MAY BE MADE AS DIRECTED BY THE ENGINEER TO BRING THE LEAKAGE WITHIN THE ALLOWABLE RATE ONE GALLON PER VERTICAL FOOT PER DAY. LEAKAGE DUE TO A DEFECTIVE SECTION OR JOINT OF EXCEEDING THE SPECIFICATION PER VERTICAL FOOT PER DAY RATE SHALL BE CAUSE FOR THE REJECTION OF THE MANHOLE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO UNCOVER, DISASSEMBLE, RECONSTRUCT OR REPLACE THE MANHOLE AS DIRECTED BY THE ENGINEER. THE MANHOLE SHALL THEN BE re-TESTED AND, IF SATISFACTORY, REPORTED.

4.) BACKFILLING. THE TEST MAY BE CONDUCTED EITHER BEFORE OR AFTER BACKFILLING AROUND THE MANHOLE. HOWEVER, IF THE CONTRACTOR ELECTS TO BACKFILL PRIOR TO TESTING, IT SHALL BE AT HIS OWN RISK AND IT SHALL BE RECORDED UPON THE CONTRACTOR TO DETERMINE THE REASON FOR ANY FAILURE OF THE TEST AND ADJUSTMENT IN THE LEAKAGE ALLOWANCE THE BE MADE FOR EXCEPTIONAL CONDITIONS. IF, I.E., IT WILL BE ASSUMED THAT ALL LOSS OF WATER DURING THE TEST IS A RESULT OF LEAKS THROUGH THE JOINTS OF THROUGH THE CONCRETE. FURTHERMORE, THE CONTRACTOR SHALL TAKE ANY STEPS NECESSARY TO ASSURE THE ENGINEER THAT THE WATER TABLE IS BELOW THE BOTTOM OF THE MANHOLE THROUGHOUT THE TEST.

VACUUM TEST:

1.) THE VACUUM TESTING SYSTEM SHALL BE SUPPLIED BY NPC SYSTEMS, INC. OR EQUIVALENT AS APPROVED BY THE ENGINEER. THE TESTING SHALL BE DONE IMMEDIATELY AFTER ASSEMBLY OF THE MANHOLE. A 60 LBS-FT TORQUE WRENCH SHALL BE USED TO TIGHTEN EXTERNAL CLAMPS THAT SECURE THE TEST COVER TO THE TOP OF THE MANHOLE. ALL LIFT HOLES SHALL BE PLUGGED WITH A NON-SHRINKING MORTAR. THE CONTRACTOR SHALL PLUG THE PIPE OPENINGS, TAKING CARE TO SECURELY BRACE THE PLUGS AND THE PIPE TO PREVENT THE PLUGS FROM BEING DRAWN INTO THE MANHOLE.

2.) A VACUUM OF 10 INCHES OF MERCURY, HG (4.9 PSI), SHALL BE DRAWN AND THE VACUUM PUMP SHUT OFF. THE MANHOLE PASSES THE TEST IF THE VACUUM REMAINS GREATER THAN OR EQUAL 10 9 INCHES HG (4.4 PSI) FOR A PERIOD. GREATER THAN ONE MINUTE FOR MANHOLES UP TO 10 FEET DEEP, ONE MINUTE FOR EACH ADDITIONAL 10-FT DEEP, AND ONE MINUTE THREE SECONDS FOR MANHOLES 15-25 FEET DEEP.

3.) IF THE MANHOLE FAILS THE INITIAL TEST, THE CONTRACTOR SHALL LOCATE THE LEAKS AND MAKE PROPER REPAIRS. LEAKS MAY BE FILLED WITH A HOT SLURRY OF ACCEPTED QUICK SETTING MATERIAL. IF THE MANHOLE FAILS THE VACUUM TEST AGAIN, ADDITIONAL REPAIRS MUST BE MADE, AND THE MANHOLE MUST BE TESTED BY EXFILTRATION AS OUTLINED IN PARAGRAPH 3.03 (A) FIELD QUALITY CONTROL.

LEAKAGE TEST

1.) THE EXFILTRATE SHALL BE MADE AS NEARLY WATERTIGHT AS PRACTICABLE, AND LEAKAGE TESTS AND MEASUREMENTS SHALL BE MADE AFTER THE PIPELINE HAS BEEN BACKFILLED.

2.) WHERE THE GROUNDWATER LEVEL IS MORE THAN 1 FT ABOVE THE TOP OF THE PIPE AT ITS UPPER END, THE CONTRACTOR SHALL CONDUCT EITHER INFILTRATION TESTS OR LOW PRESSURE AIR TESTS.

3.) WHERE THE GROUNDWATER LEVEL IS LESS THAN 1 FT. ABOVE THE TOP OF THE PIPE AT ITS UPPER END, THE CONTRACTOR SHALL CONDUCT EITHER EXFILTRATION TESTS OR LOW PRESSURE AIR TESTS.

4.) AT THE TIME OF THE TEST, THE CONTRACTOR SHALL DETERMINE THE GROUNDWATER ELEVATION FROM OBSERVATION WELLS, EXCAVATIONS OR OTHER MEANS. ALL TESTS TO REVIEW BY THE ENGINEER.

5.) FOR MAKING THE LOW PRESSURE AIR TESTS, THE CONTRACTOR SHALL USE EQUIPMENT SPECIFICALLY DESIGNED AND MANUFACTURED FOR THE PURPOSE OF TESTING SEWER PIPELINES USING LOW PRESSURE AIR. THE EQUIPMENT SHALL BE PROVIDED WITH AN AIR REGULATORY VALVE OR AIR SAFETY TO SET THAT THE INTERNAL AIR PRESSURE IN THE PIPELINE CANNOT EXCEED 8 PSIG.

6.) THE LEAKAGE TEST USING LOW PRESSURE AIR SHALL BE MADE ON EACH MANHOLE-TO-MANHOLE SECTION OF PIPELINE AFTER PLACEMENT OF THE BACKFILL.

7.) PNEUMATIC PLUGS SHALL HAVE A SEALING LENGTH EQUAL TO OR GREATER THAN THE DIAMETER OF THE PIPE TO BE TESTED. PNEUMATIC PLUGS SHALL RESIST INTERNAL TEST PRESSURES WITHOUT REGAINING EXTERNAL BRACING OR BLOCKING.

8.) ALL AIR USED SHALL PASS THROUGH A SINGLE CENTRAL PLANT.

9.) LOW PRESSURE AIR SHALL BE INTRODUCED INTO THE SEALED LINE UNTIL THE INTERNAL AIR PRESSURE REACHES 4 PSIG. GREATER THAN THE MAXIMUM PRESSURE EXERTED BY THE GROUNDWATER THAT MAY BE ABOVE THE INVERT OF THE PIPE AT THE TIME OF THE TEST. HOWEVER, THE INTERNAL AIR PRESSURE IN THE SEALED LINE SHALL NOT BE ALLOWED TO EXCEED 8 PSIG. WHEN THE MAXIMUM PRESSURE EXERTED BY THE GROUNDWATER IS GREATER THAN 4 PSIG, THE CONTRACTOR SHALL CONDUCT ONLY AN INFILTRATION TEST.

10.) AT LEAST TWO MINUTES SHALL BE ALLOWED FOR THE AIR PRESSURE TO STABILIZE BY THE BEGINNING UNDER TEST. AFTER THE STABILIZATION PERIOD, THE LOW PRESSURE AIR SUPPLY MORE SHALL BE QUICKLY DISCONNECTED FROM THE CONTROL PANEL. THE TIME REQUIRED IN MINUTES FOR THE PRESSURE IN THE SECTION UNDER TEST TO DECREASE FROM 3.5 TO 2.5 PSIG (GREATER THAN THE MAXIMUM PRESSURE EXERTED BY GROUNDWATER ABOVE THE INVERT OF THE PIPE) SHALL NOT BE LESS THAN THAN SHOWN IN THE FOLLOWING TABLE.

PIPE DIAMETER IN INCHES VS. MINUTES

6"	5.0 MIN. 40 SEC
8"	7.0 MIN. 34 SEC.
10"	8.0 MIN. 26 SEC.
12"	11.0 MIN. 20 SEC.
15"	14.0 MIN. 19 SEC.
18"	17.0 MIN. 0 SEC.
21"	19.0 MIN. 50 SEC.
24"	22.0 MIN. 40 SEC.
27"	25.0 MIN. 30 SEC.

11.) FOR MAKING THE INFILTRATION AND EXFILTRATION TESTS, THE CONTRACTOR SHALL PROVIDE SUITABLE TEST PLUGS, WATER PUMPS AND APPURTENANCES, AND ALL LABOR REQUIRED TO PROPERLY CONDUCT THE TESTS ON SECTIONS OF ACCEPTABLE LENGTH.

12.) FOR MAKING THE INFILTRATION TESTS, UNDERDRAINS, IF USED, SHALL BE PLUGGED AND OTHER GROUNDWATER DRAINAGE SHALL BE STOPPED TO PERMIT THE GROUNDWATER TO RETURN TO ITS NORMAL LEVEL, INSOFAR AS PRACTICABLE

13.) UPON COMPLETION OF A SECTION OF THE SEWER, THE CONTRACTOR SHALL DEWATER IT AND CONDUCT A SATISFACTORY TEST TO MEASURE THE EXFILTRATION FOR AT LEAST 24 HOURS. THE AMOUNT OF EXFILTRATION, INCLUDING MANHOLES, TEES, AND CONNECTIONS, SHALL NOT EXCEED 200 GAL PER INCH DIAMETER PER MILE OF SEWER PER 24 HOURS.

14.) FOR MAKING THE EXFILTRATION TESTS, THE SEWERS SHALL BE SUBJECTED TO AN INTERNAL PRESSURE BY PLUGGING THE PIPE AT THE LOWER END AND THEN FILLING THE PIPELINES AND MANHOLES WITH STEAM WATER TO A HEIGHT OF 2 FT ABOVE THE TOP OF THE SEWER AT ITS UPPER END. UNDER CONDITIONS SO TREATED MANHOLES, MAY RESULT IN TEST PRESSURES GREATER THAN 4 PSIG. MODIFY CAUSE LEAKAGE AT THE STOPPERS IN BRANCHES. PROVISIONS SHALL BE MADE BY SUITABLE TIES, BRACES, AND WEDGES TO SECURE THE STOPPERS AGAINST LEAKAGE RESULTING FROM THE TEST PRESSURE.

15.) THE RATE OF LEAKAGE FROM THE SEWERS SHALL BE DETERMINED BY MEASURING THE AMOUNT OF WATER REQUIRED TO MAINTAIN THE LEVEL 2 FT. ABOVE THE TOP OF THE PIPE.

16.) LEAKAGE FROM THE SEWERS UNDER TEST SHALL NOT EXCEED THE REQUIREMENTS FOR LEAKAGE INTO SEWERS AS HEREIN BEFORE SPECIFIED.

17.) THE SEWERS SHALL BE TESTED BEFORE ANY CONNECTIONS ARE MADE TO BUILDINGS.

18.) THE CONTRACTOR SHALL CONSTRUCT WEIRS OR OTHER MEANS OF MEASUREMENTS AS MAY BE REQUIRED.

19.) SUITABLE MANHOLES SHALL BE INSTALLED, AS REQUIRED, TO PERMIT THE TEST OF THE SEWER.

20.) SHOULD THE SECTIONS UNDER TEST FAIL, TO MEET THE REQUIREMENTS, THE CONTRACTOR SHALL DO ALL WORK OF LOCATING AND REPAIRING LEAKS AND RETESTING AS THE ENGINEER MAY REQUIRE WITHOUT ADDITIONAL COMPENSATION.

21.) IF, IN THE JUDGEMENT OF THE ENGINEER, IT IS IMPRACTICABLE TO FOLLOW THE FOREGOING PROCEDURES FOR ANY REASON, ACCEPTABLE MODIFICATIONS IN THE PROCEDURES SHALL BE MADE AS REQUIRED, BUT IN ANY EVENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ULTIMATE TIGHTNESS OF THE LINE WITHIN THE ABOVE TEST REQUIREMENTS.

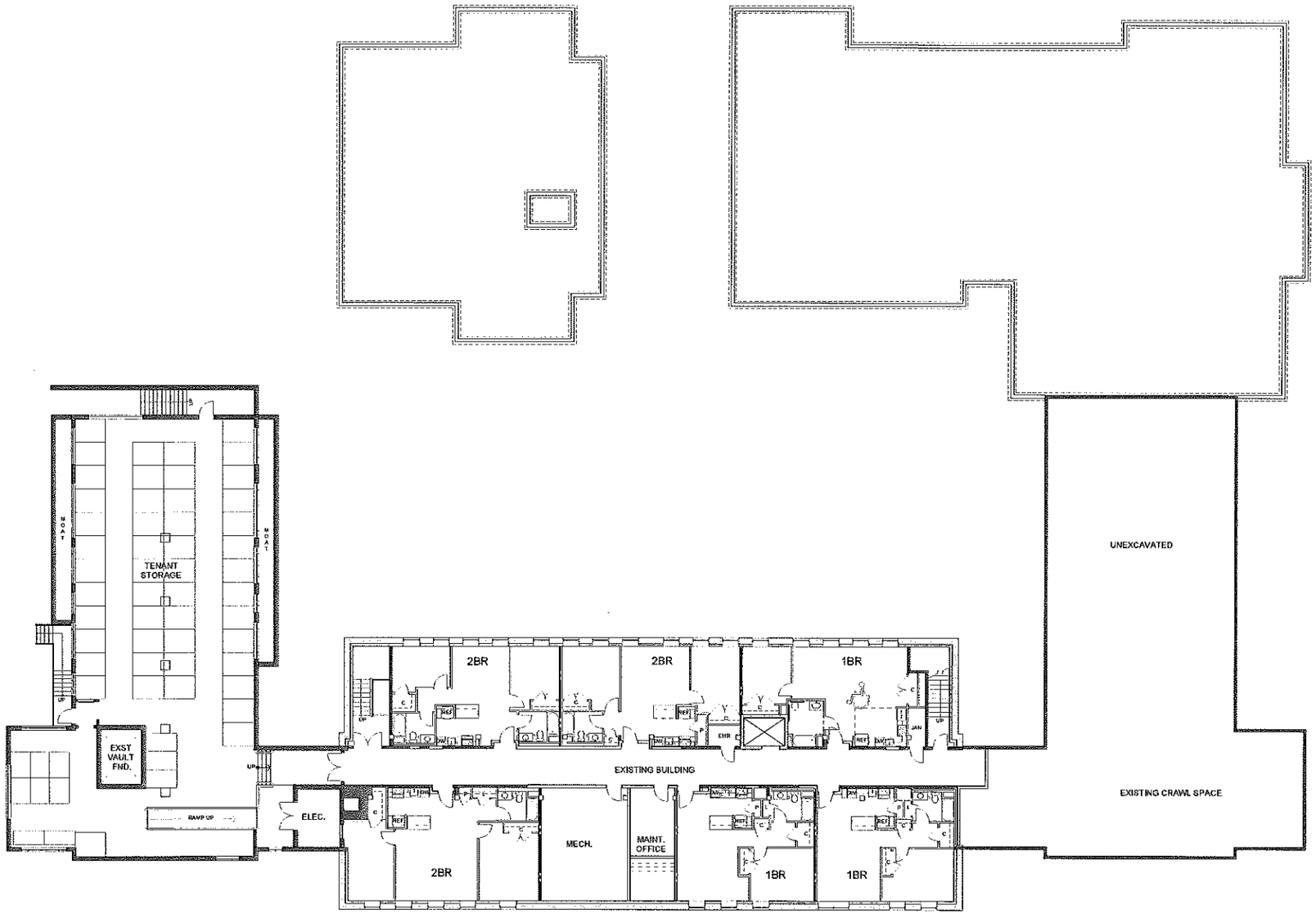
CONCRETE AND REINFORCING STEEL NOTES:

1. GENERAL
- ALL STRUCTURAL DRAWINGS ARE TO BE USED WITH THE ENTIRE SET OF DRAWINGS.
- ALL SAFETY REGULATIONS ARE TO BE STRICTLY FOLLOWED. METHODS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIALS IS THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR IS RESPONSIBLE FOR DISSEMINATION OF ALL REVISIONS AND REQUIREMENTS TO THE SUBCONTRACTORS.
- REASONABLE CARE HAS BEEN TAKEN IN THE PREPARATION OF ALL DRAWINGS AND SPECIFICATIONS. HOWEVER THE ENGINEER DOES NOT GUARANTEE ABSOLUTE HUMAN ERROR AND FOR THAT REASON IT IS IMPERATIVE THAT THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND DETAILS AND MUST VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING.
- PRESUMED ALLOWABLE SOIL BEARING CAPACITY IS 4,000 PSF. VERIFY IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.

2. CODE CONFORMANCE
TO COMPLY WITH THE LATEST RECOMMENDATIONS OF THESE STANDARDS
- ACI 301- "STRUCTURAL CONCRETE FOR BUILDINGS"
- ACI 315- "DETAILING CONCRETE WORK"
- ACI 318- "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
- ACI 322- "BUILDING CODE REQUIREMENTS FOR STRUCTURAL PLAIN CONCRETE"
- ACI 347- "FORM WORK"

3. MATERIALS

CONCRETE:
- APPROVED READY MIXED CONCRETE HAVING AN MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3,500 PSI AT 28 DAYS WITH 3/4" AGGREGATE MAX., SLUMP 3-5 INCHES UNLESS OTHERWISE NOTED
- PROVIDE AIR-ENTRAINMENT ADMIXTURE TO AID



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

0 8' 16' 24'

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CONSULTANT

MARK	DATE	DESCRIPTION
	8/30/10	MHC Submission
	8/23/10	Cape Cod Commission

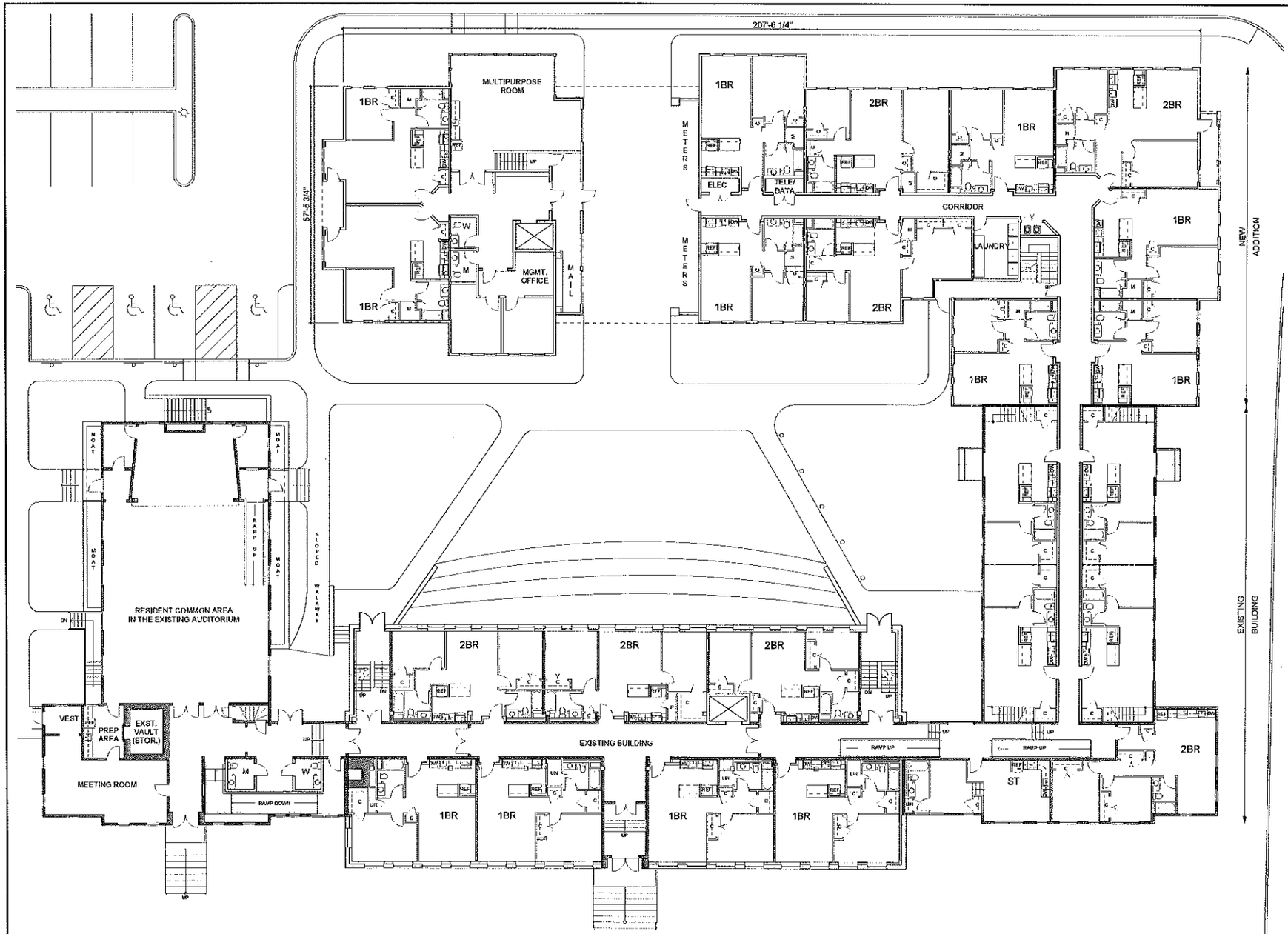
PROJECT NO.: 20909
DRAWN BY: MG
CHECKED BY: JM

SHEET TITLE

LOWER LEVEL

A-101

8/20/2010 11:43 AM



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

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	8/23/10	Cape Cod Commission

PROJECT NO.: 20009
DRAWN BY: MG
CHECKED BY: JM

SHEET TITLE

GROUND LEVEL

A-102

9/20/2010 11:43 AM

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

0 8' 16' 24'

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	6/23/10	Cape Cod Commission

PROJECT NO.: 20909
DRAWN BY: MG
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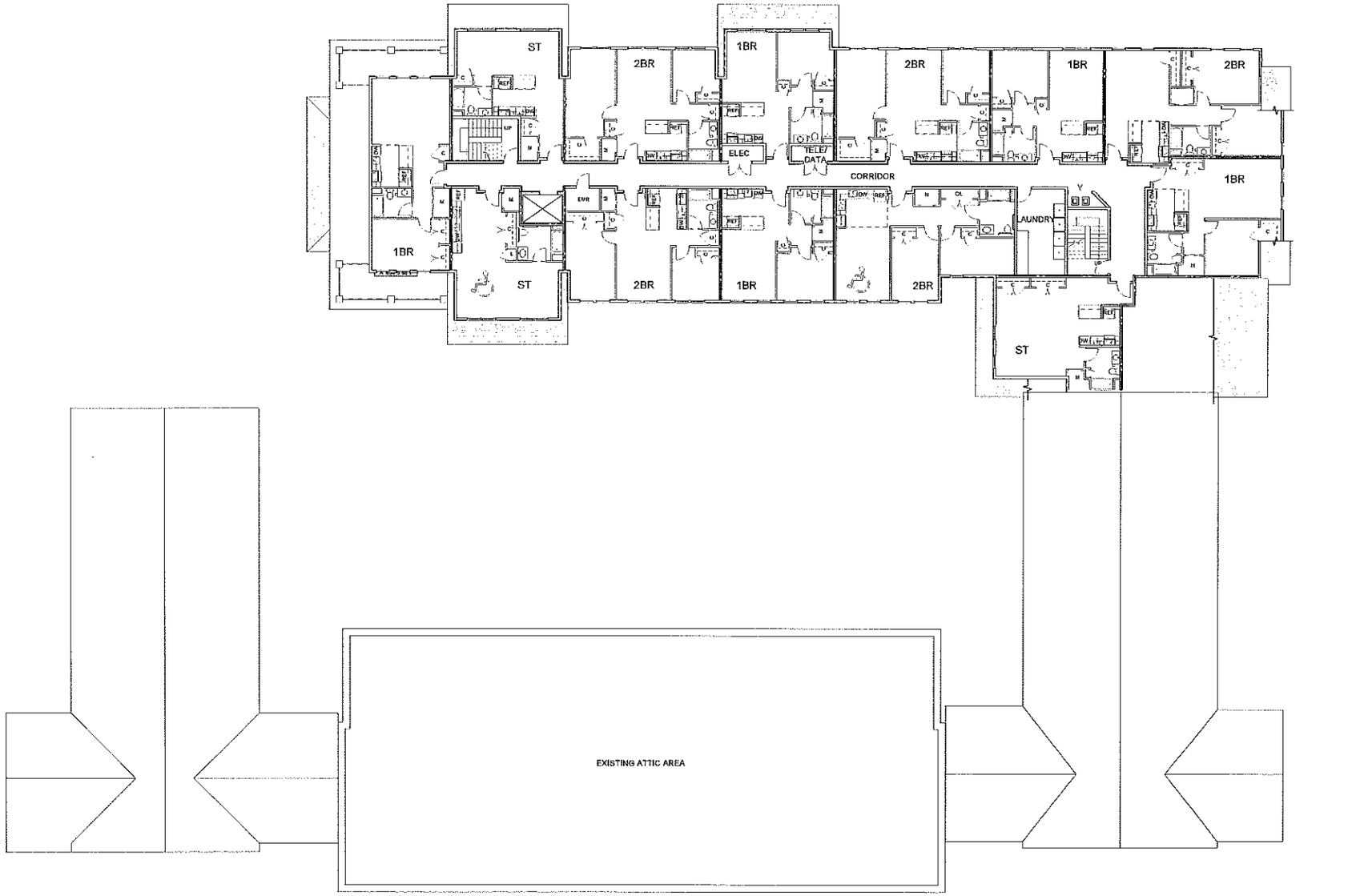
SHEET TITLE

INTERMEDIATE LEVEL

A-103

8/27/2010 11:45 AM



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

0 8' 16' 24'

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	6/30/10	MHC Submission
	6/23/10	Cape Cod Commission

PROJECT NO.: 20909
DRAWN BY: MG
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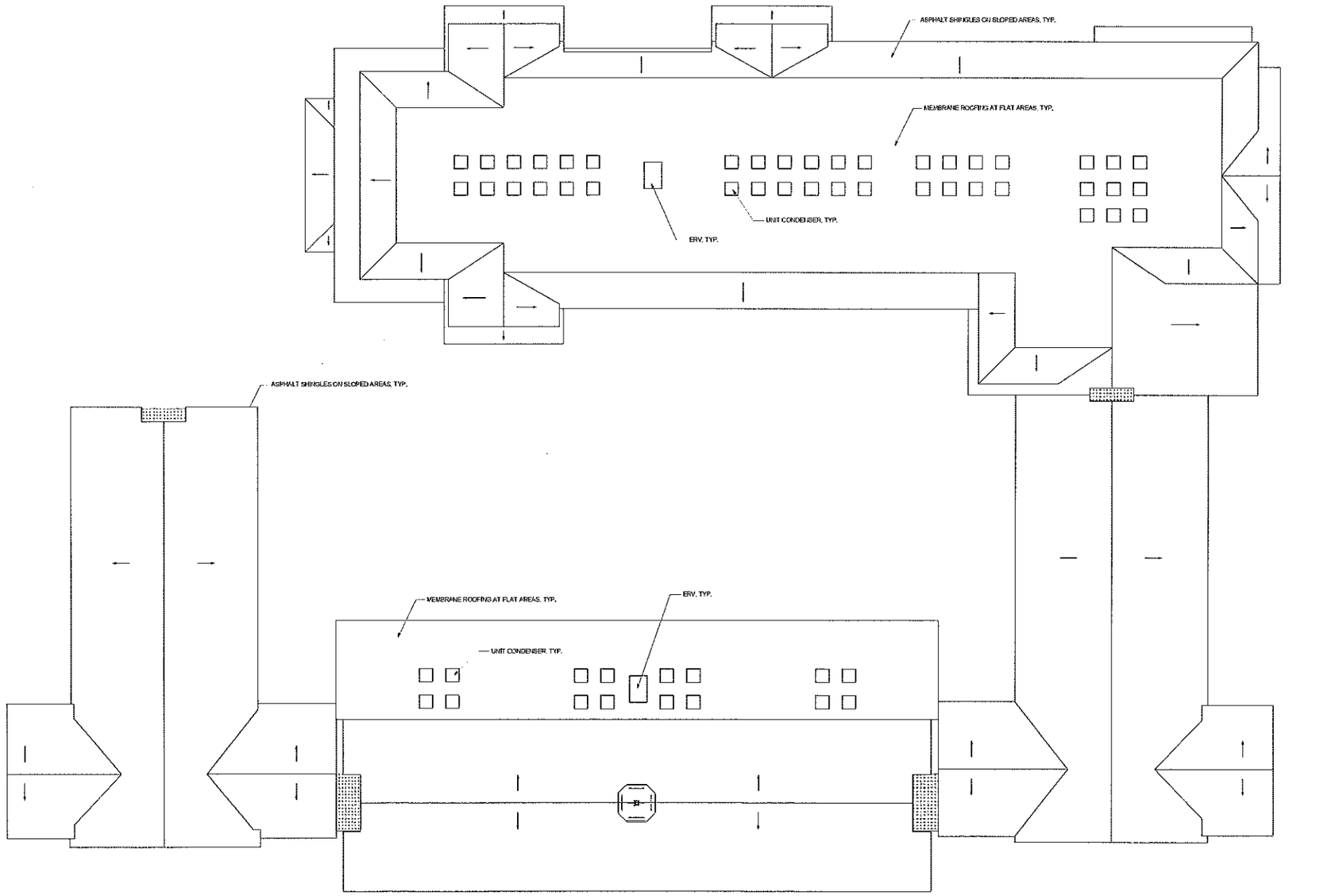
SHEET TITLE

UPPER LEVEL

A-104

6/30/2010 11:47 AM



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

0 8' 16' 24'

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	8/30/10	MHC Submission
	8/23/10	Cape Cod Commission

PROJECT NO.: 20809
DRAWN BY: MG
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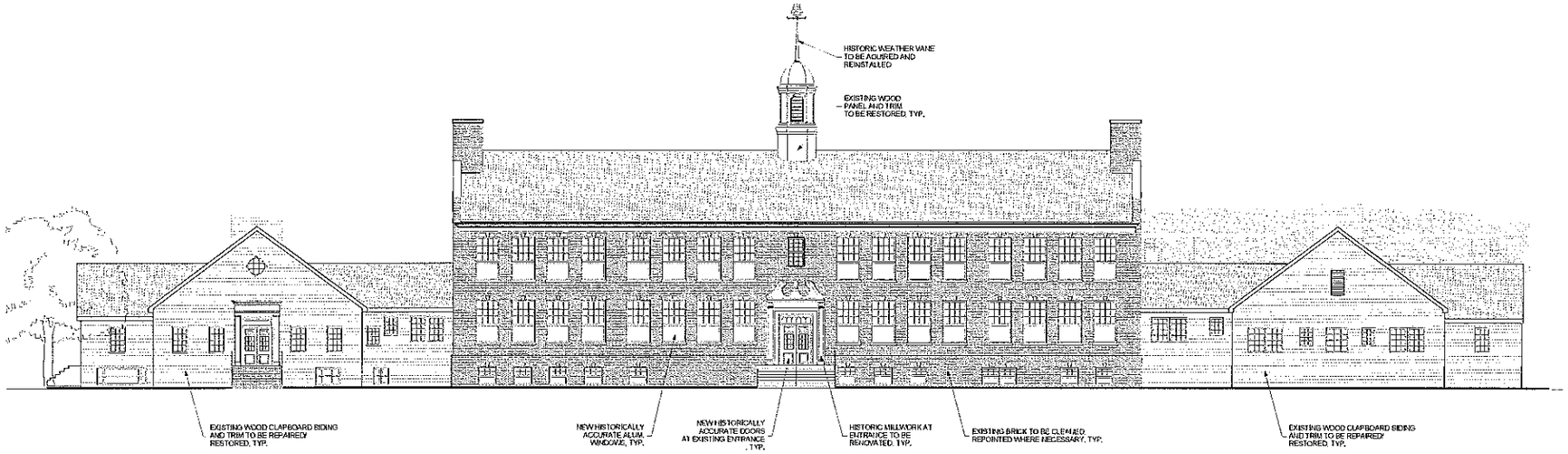
SHEET TITLE

Roof Plan

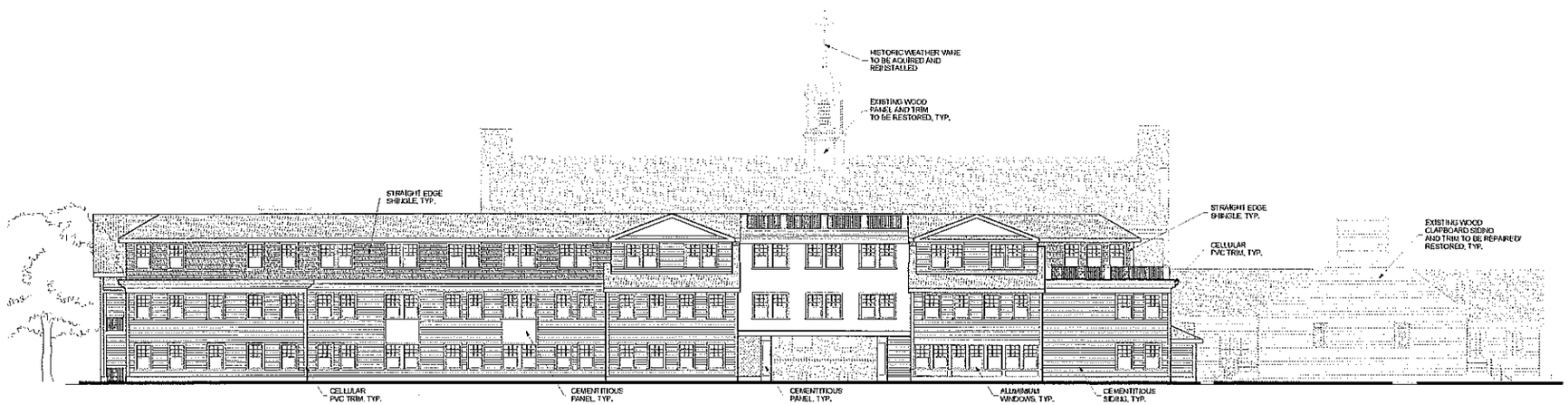
A-105

8/26/2010 11:46 AM



2 SOUTH ELEVATION
SCALE: 3/32" = 1'-0

0 8' 16' 24'



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

0 8' 16' 24'

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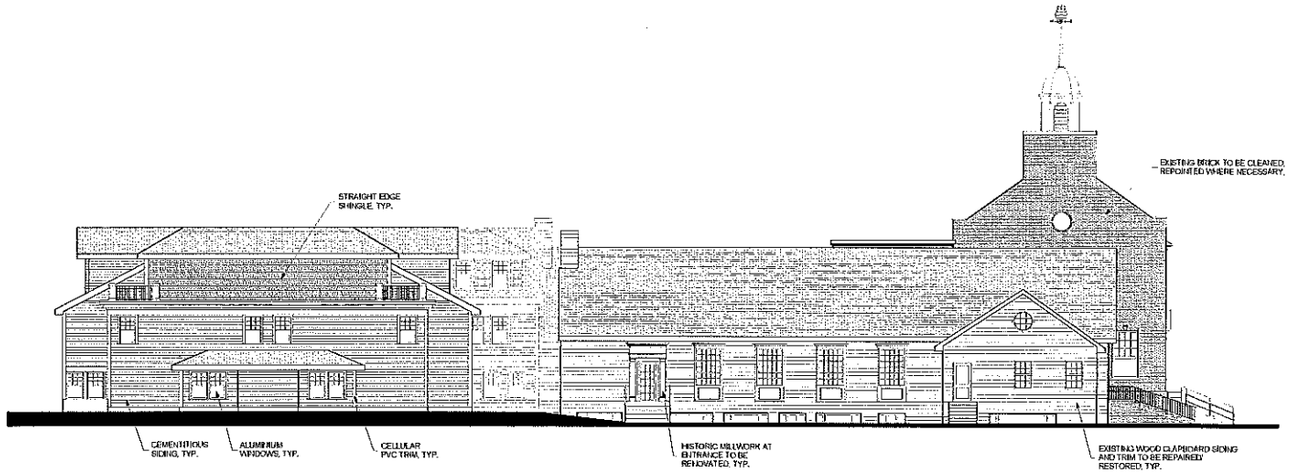
SHEET TITLE

BUILDING ELEVATIONS

A-201



2 WEST ELEVATION
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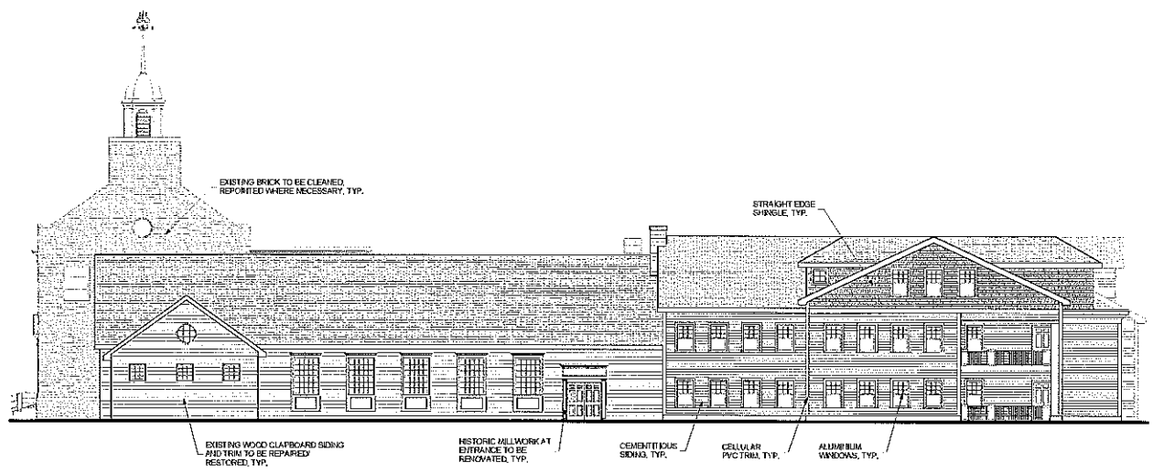

1 EAST ELEVATION
SCALE: 3/32" = 1'-0"

0 8' 16' 24'

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	8/30/10	MHC Submission
	8/23/10	Cape Cod Commission

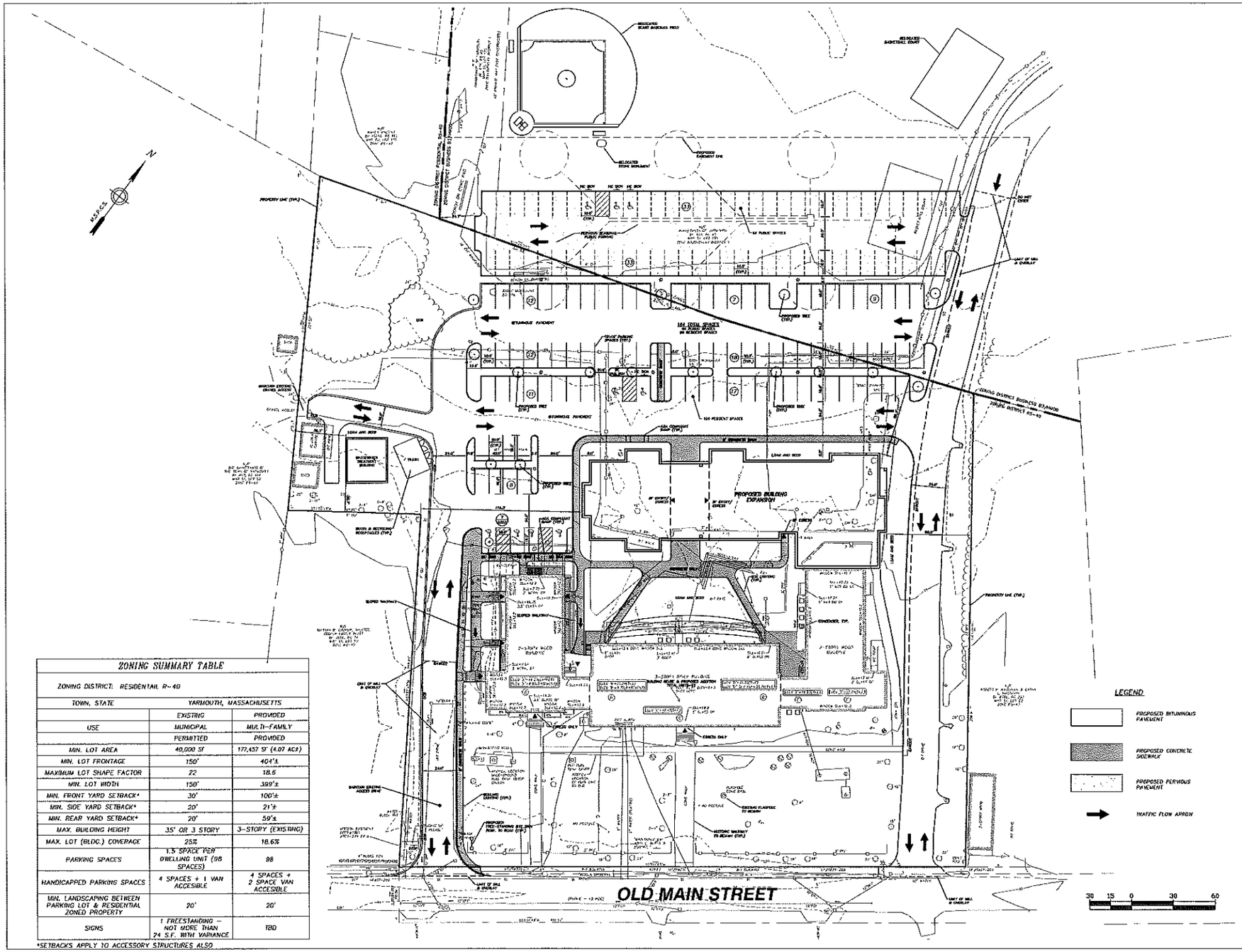
PROJECT NO.: 20909
DRAWN BY: MG
CHECKED BY: JM

SHEET TITLE

BUILDING ELEVATIONS

A-202

8/30/2010 2:44 PM



ZONING SUMMARY TABLE

ZONING DISTRICT: RESIDENTAIL R-40		
TOWN, STATE	YARMOUTH, MASSACHUSETTS	
	EXISTING	PROVIDED
USE	MUNICIPAL	MULTI-FAMILY
	PERMITTED	PROVIDED
MIN. LOT AREA	40,000 SF	177,457 SF (4.07 AC±)
MIN. LOT FRONTAGE	150'	404'±
MAXIMUM LOT SHAPE FACTOR	22	18.6
MIN. LOT WIDTH	150'	399'±
MIN. FRONT YARD SETBACK*	30'	100'±
MIN. SIDE YARD SETBACK*	20'	21'±
MIN. REAR YARD SETBACK*	20'	59'±
MAX. BUILDING HEIGHT	35' OR 3 STORY	3-STORY (EXISTING)
MAX. LOT (BLDG.) COVERAGE	25%	18.6%
PARKING SPACES	1.5 SPACE PER DWELLING UNIT (98 SPACES)	98
HANDICAPPED PARKING SPACES	4 SPACES + 1 VAN ACCESIBLE	4 SPACES + 2 SPACE VAN ACCESIBLE
MIN. LANDSCAPING BETWEEN PARKING LOT & RESIDENTIAL ZONED PROPERTY	20'	20'
SIGNS	1 FREESTANDING – NOT MORE THAN 74 S.F. WITH VARIANCE	TBD

*SETBACKS APPLY TO ACCESSORY STRUCTURES ALSO

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Norwell, MA 02061

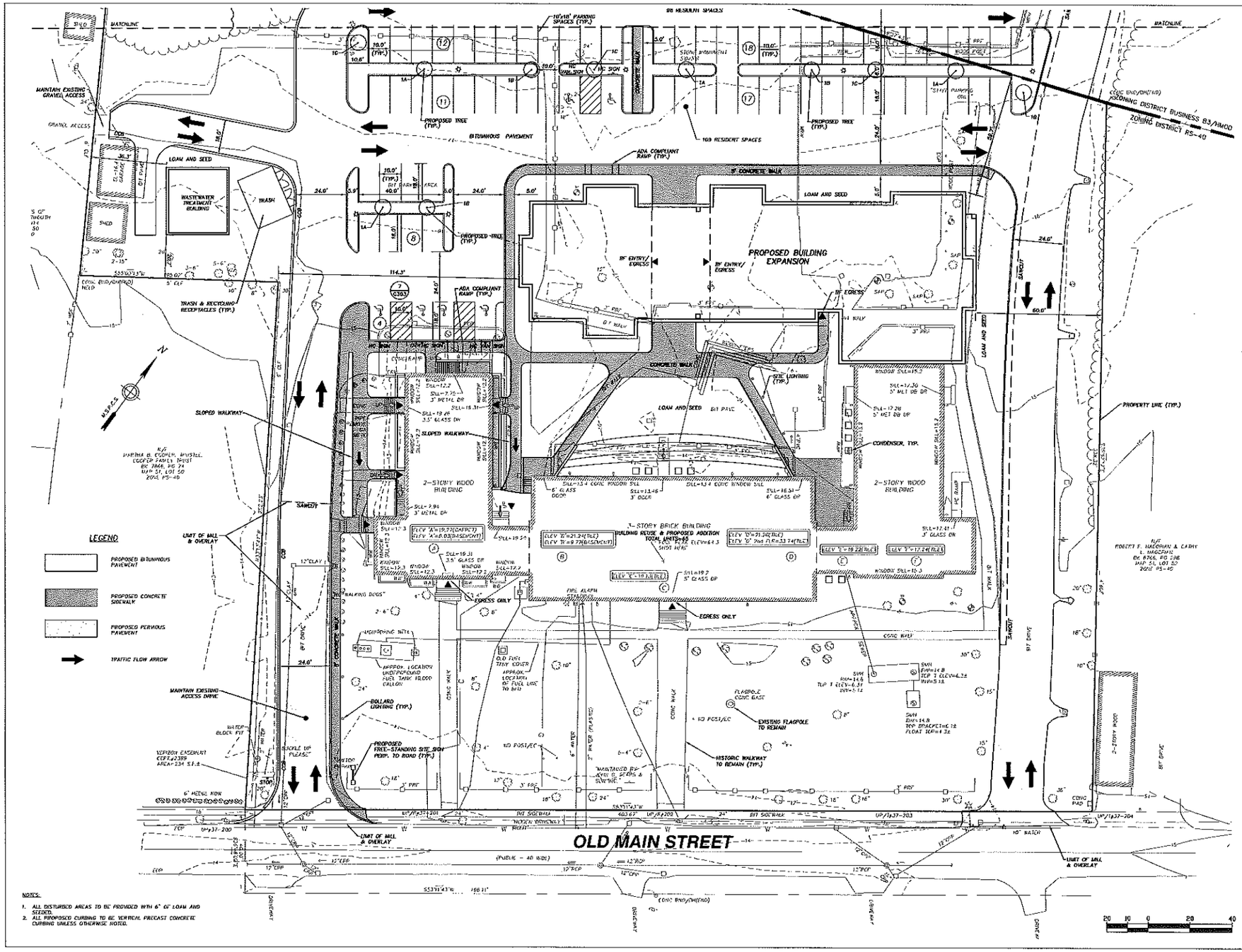
MARK	DATE	DESCRIPTION
2	09/17/10	PARKING AND TREES
1	08/25/10	CAPE COD COMMISSION SUB.

PROJECT NO.: 26-130
DRAWN BY: BPG/SZ
CHECKED BY: KK

SHEET TITLE

OVERALL LAYOUT PLAN

C-200



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MARK	DATE	DESCRIPTION
1	08/26/10	CAPE COD COMMISSION SUB.

PROJECT NO.: 26-130
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SHEET TITLE

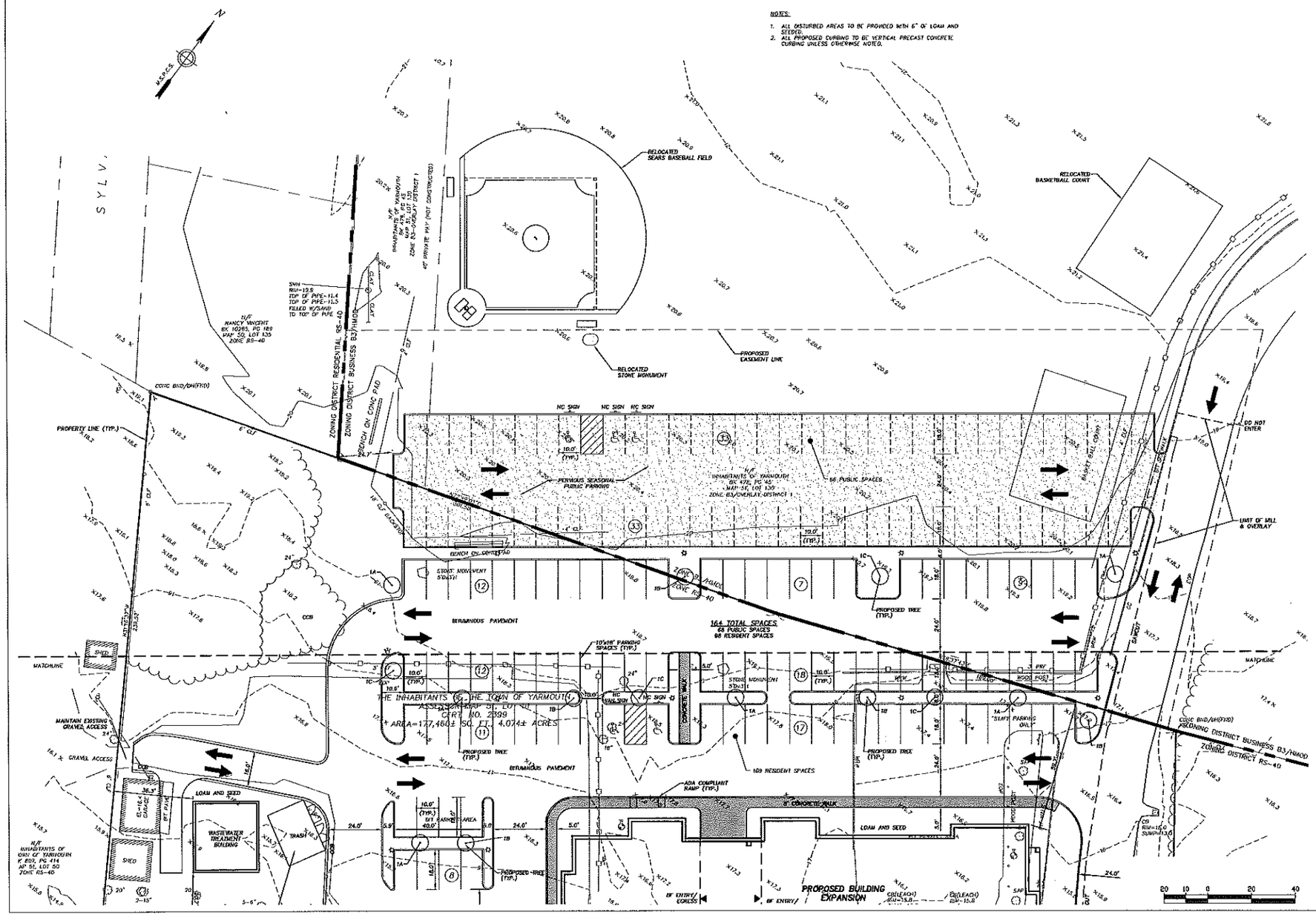
LAYOUT PLAN

C-201

Plant List					
KEY	QTY	LATIN	COMMON	SIZE	COMMENTS
A	5	Ginkgo Biloba	Ginkgo	3"-3.5" cal., B&B	8' min. branching ht.
B	5	Quercus Palustris	Pin Oak	3"-3.5" cal., B&B	8' min. branching ht.
C	4	Quercus Rubra	Red Oak	3"-3.5" cal., B&B	8' min. branching ht.

NOTES:

1. ALL DISTURBED AREAS TO BE PROVIDED WITH 6" OF LOAM AND SEEDED.
2. ALL PROPOSED CURBING TO BE VERTICAL PRECAST CONCRETE CURBING UNLESS OTHERWISE NOTED.



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MARK	DATE	DESCRIPTION
1	08/25/10	CAPE COD COMMISSION SUB.

PROJECT NO.: 26-130
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CHECKED BY: KK

SHEET TITLE

LAYOUT PLAN

C-202