

ORDINANCE NO. 06-07

AN ORDINANCE AMENDING THE LEE COUNTY, FLORIDA, LAND DEVELOPMENT CODE CHAPTER 3, EXPLOSIVES AND BLASTING REGULATIONS PERTAINING TO DEVELOPMENT BLASTING; AMENDING APPLICABILITY; WINKLER ROAD EXTENSION BLASTING PROHIBITION (LDC §3-2); PROVIDING DEFINITIONS FOR ACCELERATION, AMPLITUDE, BLAST SITE, DISPLACEMENT, HABITABLE STRUCTURE, INFRASTRUCTURE STRUCTURE, PEAK VECTOR SUM, VELOCITY AND WAVELENGTH; AMENDING DEFINITIONS OF FREQUENCY PEAK PARTICLE VELOCITY AND STRUCTURE (LDC §3-3); AMENDING BLASTING PERMIT APPLICATION REQUIREMENTS (LDC §3-5); BONDS AND ESCROW AGREEMENTS (LDC §3-7); LIMITATIONS ON BLASTING INTENSITY (LDC §3-8); LIMITATION ON BLASTING ACTIVITY (LDC §3-9); BLASTING PERMIT ISSUANCE; STANDARD PERMIT CONDITIONS (LDC §3-10); RECORD KEEPING (LDC §3-13); BLAST VIBRATION MONITORING (LDC §3-15); PRE- AND POST-BLAST CONDITION SURVEYS (LDC §3-16); VIOLATIONS AND PENALTIES (LDC §3-20); PROVIDING FOR CONFLICTS OF LAW; SEVERABILITY; CODIFICATION AND SCRIVENER'S ERRORS; AND AN EFFECTIVE DATE.

WHEREAS, pursuant to Article VIII, Section 1 of the Florida Constitution and Chapter 125 of the Florida Statutes, Lee County is authorized and required to protect the public health, safety and welfare of its citizens and has the power and authority to enact regulations for valid governmental purposes that are not inconsistent with general or special law; and

WHEREAS, Florida Statutes Sections 125.01(1)(h) and (t) authorize counties to establish, coordinate, and enforce regulations necessary for the protection of the public; and

WHEREAS, the Board adopted Lee County Land Development Code (LDC) Chapter 3 establishing regulations applicable to development blasting in Lee County on April 27, 2004; and

WHEREAS, the Board hired a consultant to study the various issues and aspects of development blasting in order to determine if appropriate levels of blasting intensity can be established for Lee County given its geology and development characteristics; and

WHEREAS, the Blasting study was completed in 2005 and the recommendations of the consultant have been considered by County staff and the Blasting Ad Hoc Committee; and

WHEREAS, the Blasting Study includes a number of proposed amendments to the LDC blasting and explosives regulations; and

WHEREAS, Lee County Comprehensive Plan Policy 5.1.5 provides protection for future and existing residential uses from the encroachment of uses that are destructive to the character and integrity of the residential environment; and

WHEREAS, Goal 24 of the Lee County Comprehensive Land Use Plan (Lee Plan) mandates that the County maintain clear, concise, and enforceable development regulations that fully address on-site and off-site development impacts, yet function in a streamlined manner; and

WHEREAS, the Board of County Commissioners adopted the Lee County Land Development Code, which contains a comprehensive compilation of regulations applicable to the development of land in Lee County; and

WHEREAS, the Blasting Ad Hoc Committee has reviewed the Blasting study and the proposed amendments to Chapter 3; and

WHEREAS, the Land Development Code Advisory Committee was created by the Board of County Commissioners to explore amendments to the Land Development Code; and

WHEREAS, the Land Development Code Advisory Committee has reviewed the proposed amendments to blasting regulations and recommends adoption; and

WHEREAS, the Executive Regulatory Oversight Committee reviewed the proposed amendments to the Code and recommends adoption; and

WHEREAS, the Local Planning Agency reviewed the proposed amendments on March 27, 2006 and found them consistent with the Lee Plan; and

WHEREAS, the provisions and regulations hereinafter contained and enacted are for the purpose of securing and promoting the public health, safety and welfare of the inhabitants and property of Lee County.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA:
SECTION THREE: AMENDMENT TO LDC CHAPTER 3.

Lee County Land Development Code Chapter 3 is hereby amended as follows with strike through identifying deleted provisions and underline identifying additional provisions.

Chapter 3

EXPLOSIVES AND BLASTING REGULATIONS

ARTICLE I

DEVELOPMENT BLASTING

Sec. 3-2. Applicability; Winkler Road extension blasting prohibition.

- (a) No change.
- (b) No change.
- (c) Development blasting activity is prohibited within the Winkler Road Extension area described as follows:

That land within the Suburban and Outlying Suburban Land Use Categories as defined in the Lee County Comprehensive Plan, lying south of Summerlin Road within Sections 34 and 35, Township 45 South, Range 24 East and Sections 2, 3, 4, 9, 10 and 11, Township 46 South, Range 24 East and west of Hendry Creek.

Sec. 3-3. Definitions.

The following words, terms and phrases will have the meanings stated in this section.

Acceleration means the velocity per unit time.

Amplitude means a time varying or kinematic vibration quantity of displacement, velocity, or acceleration. These all have instantaneous values at any moment and also peak values at a specific moment for any vibration record.

Blast site means the limits or boundary of the excavation area that will be subject to the blasting activity. For example, the boundary of a proposed lake within the development seeking a development blasting permit.

Displacement means the amount of deviation or distance of any particle or point from its rest position.

Frequency means the ~~blast energy over time~~ number of cycles per unit time. In vibration analysis, unit time is a second. Frequency is the number of times the particles (see Peak Particle Velocity) move back and forth in one second. This back

and forth motion can also be referred to as oscillations. The number of oscillations/second or cycles/second that a particle makes under the influence from the vibration is measured in hertz.

Habitable structure means a building, existing or under construction, or related facility that can be inhabited or occupied by one or more persons. It includes, but is not limited to, homes, mobile homes, commercial enterprises and buildings, offices, hospitals, public service buildings (ie fire station), and other structures that may be occupied by a person; and, the accessory structures associated with the building such as pools, wells, garages, foundations, docks, seawalls, driveways, concrete slabs and other similar structures within a 100 foot radius around a habitable structure.

Infrastructure structure means a facility or structure, existing or under construction, that is used to support use of habitable structure or community growth. It includes roadways, water and sewer lines, utility poles, equipment boxes, pump stations, drainage facilities, water management facilities, bridges, tunnels, and other similar infrastructure related facilities and structures.

Peak particle velocity (PPV) means a measurement of ground vibration velocity in the displacement per unit time in reference to the speed or excitation of the particles in the ground resulting from vibratory motion. In blasting, ground particles oscillate in response to a vibration wave. This oscillation is measured in particle velocity. The maximum rate is Peak Particle Velocity (PPV). This is measured in inches per second or millimeters per second. Peak Particle velocity is the maximum rate of particle movement.

Peak Vector Sum or Resultant Peak Particle Velocity means the sum of the three peaks in a vibration wave. This sum is not the same as the Peak Particle Velocity and is not the appropriate measure under this code.

Structure means a building or facility that is existing or under construction. It includes, ~~but is not limited to, homes, mobile homes, buildings, roadways, utilities, foundations, pools, wells, drainage facilities, water management facilities, seawalls, docks, driveways, concrete slabs and similar improvements~~ both infrastructure structures and habitable structures.

Velocity means displacement per unit time. Rate of change or displacement, or how fast a particle moves from its rest position to its maximum displacement position and back.

Wavelength means one complete cycle.

No change to the balance of this section.

Sec. 3-5. Blasting permit application requirements.

(a) *Application.* Only a locally registered user may apply for a blasting permit. The application must include the following:

- (1) Name, address and contact information for the following individuals:
 - a. User (the permit applicant);
 - b. Blaster;
 - c. Developer;
 - d. Property owner;
 - e. Engineer creating or corroborating the blasting plan;
 - f. Seismograph operator; and
 - g. Person to conduct pre- and post-blast surveys.
- (2) Local registrations for the user and blaster responsible for proposed activity.
- (3) Location of proposed blasting activity. (Include Strap number, physical address, metes and bounds legal description with accompanying sketch, and an aerial depicting project site.)
- (4) A description of the project to be benefitted by the blasting activity, including a copy of the approved local development order, and an explanation of why the blasting is necessary.
- (5) A sketch of the proposed blasting site/project superimposed over an aerial, showing measured distances from all structures, buildings, streets, above and below ground utilities, wells and other facilities within ~~1,500~~ 1000 feet of the blasting site.
- (6) A list of all property not under the ownership or control of the user, blaster or developer within ~~3,000~~ 2,000 feet of the blast site. This list must include the name and address of the property owner, whether the property is improved, and the type of structure and occupancy.
- (7) A proposed blasting plan that includes:
 - a. description of proposed blasting procedure;
 - b. an estimate of the total number of cubic yards to be removed as a result of the blasting;
 - c. an estimate of the number of blasts to be detonated;
 - d. the quantity and type of explosives to be used;
 - e. maximum amount of explosives per delay;
 - f. maximum number of holes per delay;

- g. proposed delay between holes and rows; and
 - h. proposed placement of seismographic machines.
- (8) Estimated starting date and completion date for blasting operations.
- (9) Hours of intended blasting operations.
- (10) Traffic control, barricading and sign plan.
- (11) Warning notification plan.
- (12) Letter of permission and authorization, signed by the property owner and acknowledged before a notary, allowing the proposed blasting activity.
- (13) Written approval, or letters of no objection, from the Lee County Department of Transportation, Lee County Port Authority, Lee County Utilities, and the utility entities holding franchise rights within ~~3,000~~ 2,000 feet of the proposed blasting site. The approval letter may impose conditions on the blasting activity that are intended to preserve and protect structures for which the entity is responsible.
- (14) Other information deemed necessary or appropriate by the Director or Board, which may include, but is not limited to:
- a. pre-blast assessment, prepared by a geotechnical engineer or other blasting professional, which assesses the geology of the blast site and surrounding area out to ~~3,000~~ 2,000 feet and the potential for damage to structures and facilities within ~~3,000~~ 2,000 feet of the blast site;
 - b. pre-blast inspection of structures and facilities located near the proposed blast location. (Including video taping of structures);
 - c. bond to protect County facilities;
 - d. hydrological study;
 - e. geological study; and
 - f. test wells.
- (b) *Fees.* The established fee for blasting permit applications and blasting inspections are set forth in the Lee County Administrative Code.
- (c) *Escrow Agreement.* Prior to issuance of the blasting permit, the applicant must deliver an executed escrow agreement, acceptable to the County Attorney's office, and fully funded with cash in the amount of \$50,000.

Sec. 3-7. Bonds and escrow agreements.

Bonds required as a condition of permit approval must be in a form prescribed by the County and found legally sufficient by the County Attorney's office.

Escrow agreements must be executed on the form required by Lee County and funded with cash. Prior to issuance of a blasting permit, the escrow agreement must be reviewed and approved by the County Attorney's office. In all instances the County will act as the escrow agent. Funds will be disbursed from the escrow account in accord with the terms of the agreement and section 3-19.

The sole purpose of this escrow agreement is to compensate property owners for damage (cosmetic or structural) to their property resulting from the blasting activity. To ensure sufficient funds will be available for payment, the agreement must include a provision for replenishment to maintain the minimum \$50,000 balance.

Disbursements from the escrow account will be made by the County based upon the decision of the arbiter as a result of binding arbitration proceedings. The developer is solely responsible for the costs associated with the arbitration proceedings.

Sec. 3-8. Limitations on blasting intensity.

(a) Blast intensity will be measured in all four compass directions at the nearest structure not owned by the Developer, as measured from the boundary of the blast site. If no structure exists within one mile of the blast site, then the measurement will be taken at the one mile mark in the direction of the nearest structure or at an alternative location specifically identified by the approved blasting permit. ~~However, Subsequent to the issuance of the blasting permit,~~ the Director has the discretion to require monitoring of intensity levels at alternate locations not under the ownership or control of the developer, user or blaster if such is warranted based upon complaints received by the County after the blasting activity begins. These alternate locations may be inside or outside the overall development project boundary.

(b) Blast intensity may not exceed any of the following limits:

Peak Particle Velocity (PPV):

Calculating PPV using the Peak Vector Sum is prohibited for purposes of compliance with this code.

Habitable Structure 0.30 inches per second

Utility 5.0 inches per second

Bridge 5.0 inches per second

Roadway 10 inches per second for roadway outside the known fracture zone of the blast.

Airblast overpressure: 134 peak dBL (linear) at a habitable structure
~~—0.1 Hz high-pass system~~
 133 peak dBL (linear) ~~2 Hz high-pass system~~
 129 peak dBL (linear) ~~5 or 6 Hz high-pass system~~

(c) ~~80% Rule.~~—If the user or blaster, based upon their expertise and experience, have reason to believe that a blast will exceed 80% of one or more of the intensity thresholds set forth above, then blasting activity must cease immediately. ~~Blasting activity will be permitted to resume after the user obtains approval for a modification of the blasting permit that will ensure the blasting intensity does not exceed the intensity limitations set forth in subsection 3-8(b).~~

In addition to the above, if the daily shot records submitted for the blasting activity in accordance with this article indicate 80% of one or more intensity limitations set forth above have been exceeded, ~~all blasting activity must cease. Blasting activity will be permitted to resume only after the user obtains approval for a modification of the blasting permit that will ensure the blasting intensity does not exceed the intensity limitations set forth in subsection 3-8(b).~~

Sec. 3-9. Limitation on blasting activity.

(a) No blasting activity may occur within 600 feet of a habitable structure.

(b) Blasting activity proposed within 600 feet of a structure ~~not under the ownership or control of the developer, user or blaster, is prohibited;~~ (ie infrastructure such as a road), other than a habitable structure, may be permitted if all of the following criteria are met. The 600 feet will be measured ~~from the boundary of the proposed blast site, in accordance with section 3-17.~~

(1) No habitable structures are within a 600 foot radius of the blast site boundary, as measured in accord with section 3-17;
and

(2) Blasting within 300 feet or less from a structure is required to use rubber tire blasting mats; and

(3) Blasting within 301 to 600 feet from a structure is required to use rubber tire blasting mats or provide at least 3 feet of *in situ* overburden or additional cover (ie sand or dirt).

~~A limited exception may exist where the only structures within the 600 foot area constitute infrastructure (i.e. roads or utilities) under the ownership and control of a public entity and the public entity specifically states in writing to the Director that it does not object to the proposed blasting. If the public entity does not object to the proposed blasting within 600 feet and the subject structure consists of ductile iron pipe carrying potable water, then the public entity may also waive the 0.3 PPV blast intensity limitation, but only for the subject structure. This waiver must also be in writing to the Director. If this occurs, the Board has the discretion to issue the permit allowing the proposed blasting.~~

Sec. 3-10. Blasting permit issuance; Standard permit conditions.

(a) *Blasting permit required.* It is unlawful to conduct development blasting activity, including test blasting, within the unincorporated area of Lee County without a valid blasting permit issued in accordance with this article.

(b) *Right to permit approval.* Issuance of a blasting permit is a privilege and not a right. ~~Issuance of a permit constitutes a discretionary act of the Board based upon review of the permit application and relevant information available to the Board from County departments and files concerning the user, blaster, developer or owner of the subject project. Denial of a blasting permit application will include a written explanation for the denial.~~ The Board of County Commissioners may prohibit development blasting by imposing a condition in a zoning resolution or otherwise by adopting an ordinance. An applicant's ability to comply with the criteria and conditions set forth in this Chapter does not override the Board's action to prohibit development blasting at a particular location.

Blasting permit applications will be reviewed by the ~~Board as a public hearing agenda item.~~ Public hearings will be scheduled for 9:30 or as soon thereafter as they may be heard. ~~Director.~~ County staff will prepare a written recommendation, including proposed permit conditions, to accompany the permit application as part of the ~~agenda item backup package provided to the Director for action on the permit application.~~ The conditions set forth in this article will be considered the minimum conditions applicable to blasting permit approval.

As part of the permit review process, the ~~Board~~ Director will consider, at minimum, the compatibility of the proposed blasting activity with the surrounding community, and the proximity of schools, churches, health care facilities and public infrastructure facilities to the blast site. ~~Notwithstanding the above, a~~ A ~~blasting permit will~~ may be denied if the ~~Board~~ Director believes approval of the proposed blasting activity is not in the best interest of the public health, safety and welfare of its County citizens. Denial of a blasting permit application will include a written explanation for the denial.

(c) *Permit denial.* The Department of Transportation, Lee County Port Authority, Lee County Utilities, or an entity holding a utility franchise within the area affected by the proposed blasting activity has the right to deny a blasting permit application in order to afford reasonable protection of public infrastructure or facilities. The reason for the denial must be specifically stated in writing.

(d) *Standard conditions.* The following provisions constitute the standard conditions applicable to development blasting permits.

- (1) County staff has the right to enter upon the property and complete all necessary inspections related to the blasting activity or in response to complaints resulting from the blasting activity.

- (2) Hours of blasting activity: 10am-4pm Monday through Friday
No weekends
No State holidays
No Federal holidays
- (3) The permit is issued to the user identified in the application and allows the blaster identified in the application to conduct the blasting activity. If the blaster identified in the application changes subsequent to the application submittal or after the permit is issued, then the user must notify the County as to the name, address, contact information and registration requirements of the replacement blaster prior to detonation of blasts by the replacement blaster.
- (4) The responsible user, blaster and engineer or engineer's designee, identified in the permit application, must be onsite during all phases of the physical blast preparation (drilling holes, etc.) and detonation activity.
- (5) No detonation of explosives (blasting) may occur without appropriate County staff on site.
- (6) Notice of the proposed blast time must be provided to Lee County Code Enforcement and the Fire District 24 hours prior to the blast in accordance with section 3-14. A Code Enforcement inspector must be on-site during the blast.
- (7) A blasting permit is issued to the user and is not transferable.
- (8) A record of each blast must be maintained in accordance with section 3-13.
- (9) A permit is valid for 90 days from date of issuance, unless otherwise specifically stated on the face of the permit. Permit extensions are allowed in accordance with section 3-12.
- (10) Issuance of the blasting permit does not relieve the applicant, the user, the blaster or the developer of responsibility for the results of the blasting activity, including the accuracy and adequacy of the blasting plan as implemented in the field.
- (11) The developer is responsible for handling, discharging or settling all damage or annoyance claims resulting from the blasting activity.
- (12) The developer must execute an escrow agreement and fund a cash

escrow account prior to issuance of the blasting permit. The sole purpose of this escrow agreement is to compensate property owners for damage (cosmetic or structural) to their property resulting from the blasting activity. Lee County will be the escrow agent. Disbursements from the escrow account will be made by the County based upon the decision of the arbiter as a result of binding arbitration proceedings. The developer is solely responsible for the costs associated with the arbitration proceedings.

Sec. 3-13. Record keeping.

The permit applicant (user) is responsible to maintain a record of each blast. A copy of the record must be filed with Lee County Code Enforcement, on a Lee County Standard Blast Report Form, no later than 10 a.m. of the workday following the blast. All original blasting records must be retained by the user responsible for the blasting activity for at least three years following the conclusion of the blasting activity. The records must be available for inspection by the County upon request. The blasting records must include the following information:

- (a) Name, address and license number of the user responsible for the blasting activity;
- (b) Name, address and permit number of the blaster conducting the blasting activity;
- (c) Date, time and location of the blast;
- (d) Blast pattern diagram and firing times;
- (~~e~~) Type of material blasted;
- (~~f~~) Number of holes, spacing, burden;
- (g) Number of wet holes and water depth;
- (~~h~~) Diameter and depth of holes;
- (~~g~~i) Type of explosives used ~~per hole~~;
- (~~h~~j) Amount of explosives used;
- (~~i~~k) Maximum amount of explosives/pounds per delay;

- (j) Maximum number of holes per delay;
- (k) Method of firing and type of circuit;
- (l) Weather conditions (including factors such as wind direction, temperature, cloud cover etc);
- (m) Height or length of stemming;
- (n) Type of stemming used;
- (o) Whether mats or other types of protection were used; type of mats used;
- (p) Type of detonators used ~~and delay periods used~~ (ie electronic or non-electronic);
- (q) Number of detonators used;
- (r) Number of primers used;
- (s) Number of holes decked; deck separation; weight of explosives per deck; depth of decking;
- (t) Location of each seismograph; set up procedure used;
- (u) The PPV, airblast overpressure and frequency measurements for the blast;
- (v) Global position system direction and distance in feet to the nearest building in each compass direction;
- (w) Copy of strip tape from seismograph showing readings, marked with date, time and machine location, and signed by seismograph operator.
- (x) Type and make of blasting machine; and
- (y) Development blasting permit number.

Sec. 3-15. Blast vibration monitoring.

All blasts must be monitored using seismograph equipment that meets the criteria and requirements of this section. The purpose of the seismographic readings are to confirm compliance with the provisions of this article.

(a) *Seismograph equipment.* The instrumentation used must meet the following minimum criteria.

- (1) Capable of measuring the three mutually perpendicular components of particle velocity in directions vertical, radial and perpendicular to the vibration source. The equipment must be capable of measuring a frequency response of 2 Hz to 200 Hz, with no greater than a 3dB roll off, and PPV of up to at least 4 10 inches per second; and have an airblast channel frequency range of .1 to 200 Hz, 2 to 200 Hz, 5 or 6 to 200 Hz.
 - (2) Capable of recording the full wave form from a single blast as well as continuous monitoring.
 - (3) Capable of providing a contemporaneous printed hard copy (strip chart) of the full wave form and PPV data in the field as well as recording digital data as a permanent record. Instruments limited to recording seismic activity at a remote location for later retrieval and dissemination may not be used to meet LDC requirements, they will be considered supplemental only.
 - (4) Each piece of the monitoring equipment must be labeled with a serial number. This serial number must be cross referenced or otherwise identified on the field print out copy as well as the permanent digital record.
 - (5) Components of the monitoring equipment must be calibrated as a unit and remain together as a unit for the duration of the permitted blasting activity. Mixing various pieces together that were not calibrated for use as a unit will not satisfy the requirements of this section.
 - (6) Monitoring equipment must be calibrated at least once every 6 months or in accordance with the manufacturer's written instructions and recommendations. Written documentation as to the calibration, including identification of the unit parts, who performed the calibration and the standard used, must accompany the instruments and be available for immediate inspection upon request by the County.
- (b) *Set up of seismograph equipment.*
- (1) Set up of the equipment must be in accordance with accepted industry standards as identified by the International Society of Explosive Engineers or the US Department of Interior, Bureau of Mines Report RI 8508.
 - (2) Seismograph equipment must be set up at the locations approved as part

of the blasting plan.

- (3) Whenever possible, monitoring equipment must be placed in undisturbed soil. Placement on driveways, walkways or slabs must be avoided.
- (4) The ~~Board~~ Director or their designee may require additional monitoring devices if, after a field inspection with the monitors in place, additional monitoring appears appropriate or necessary to establish compliance with the provisions of this article.

(c) *Location of seismograph equipment.* Blast intensity must be monitored in all four compass directions. Seismic monitoring equipment must be located at the nearest structure not owned by the Developer that is within one mile of the blast site boundary. If no structure exists within one mile of the blast site, then the measurement will be taken at the one mile mark in the direction of the nearest structure, or as otherwise determined by the ~~Board~~ blasting permit approval.

(d) *Inspection of seismograph equipment.* Code Enforcement is required to inspect all monitoring equipment prior to the blast. The user or developer must facilitate these inspections, including the provision of transportation over difficult terrain, if necessary.

(e) *Contemporaneous reporting requirements.* A copy of the paper read out (strip chart), or other media specifically approved by the Director as part of the blasting permit, from each unit recording the blast activity must be provided to the Code Enforcement inspector immediately after the blast. A copy of the paper read out (strip chart) from each unit recording the blast activity must be provided to the County along with the standard blast report. The strip chart must include a full wave form and specifically identify the exact monitoring location; the date, time and place of the blast activity, the PPV, frequency and airblast overpressure; and be signed by the seismograph operator.

(f) *Followup reporting requirements.* The user must submit the following written documents to Lee County Code Enforcement by 10 a.m. the workday following the blast.

- (1) Copy of the ~~daily shot~~ Lee County standard blast report that includes all of the blast record keeping information identified in section 3-13.
- (2) A copy of the digital data generated by each required seismograph unit, with a copy of the corresponding printed strip chart attached.

Sec. 3-16. Pre- and post-blast condition surveys.

- (a) *Generally.*
- (1) All condition surveys must be conducted by a professional with the appropriate credentials and experience. A copy of the *curriculum vitae* or resume detailing the reviewer's credentials must be attached to each survey report.
 - (2) Condition surveys must be made available as follows:
 - a. *Pre-blast condition survey:* A copy, including color copies of all photos, must be provided to the owner of the structure or facility surveyed and Lee County Code Enforcement prior to the detonation of any blasts allowed under the permit.
 - b. *Post-blast condition survey:* A copy, including color copies of all photos, must be provided to the owner of the structure or facility surveyed and Lee County Code Enforcement upon completion, but no later than 10 days after the physical survey date.
 - (3) *Content of condition survey report.* The survey must document the current interior and exterior condition of the structure, facility, pool, seawall, dock, driveway, foundation, well, sprinkler system, utilities, drainage facility, water management facility, concrete slab or other improvements on the property that is the subject of the survey. The survey must include sufficient documentation to satisfy all typical insurance carrier requirements related to substantiating a claim for damage, including but not limited to, documenting the status of the structural engineering.
 - (4) *Cost.* The cost of condition surveys will be borne by the user, blaster and developer.
- (b) *Pre-blast condition survey.*
- (1) ~~4,500~~ 1,000 foot radius around blast site.

Prior to conducting blasting activity, the user and developer must obtain a professional pre-blast condition survey for all structures and facilities within a ~~4,500~~ 1,000 foot radius of the blast site. Structures and facilities touched by the ~~4,500~~ 1,000 foot radius measurement, must be included in the survey requirement.

The professional conducting the survey must provide a written notice to the owner and tenants of the property. This notice must indicate the reason for the survey, the proposed date and time of the survey, and a local or toll free

contact number for purposes of scheduling an alternative date or obtaining additional information. A copy of this notice must be provided to Code Enforcement.

If the owner of the structure or facility refuses to allow access to conduct the pre-blast survey, the professional attempting to survey the property must note this on the survey form. The property owner should sign the form to verify refusal. At least three attempts must be made to notify the owner of the need for the survey. The user and developer have the burden to prove the property owner refused the pre-blast survey. Sufficient proof of refusal will consist of either: (a) a written document signed by the property owner stating they understand the purpose of the blast survey and refuse to have it conducted; or (b) a sworn affidavit from the professional hired to conduct the survey setting forth the details related to the property owner's refusal, including a narrative about the attempts to obtain permission to conduct the survey, and the information provided to the property owner regarding condition surveys.

A copy of all pre-blast surveys, including documentation as to any property owner's refusal, must be submitted to Code Enforcement prior to conducting the permitted blasting activity.

- (2) *Area between ~~1,500~~ 1,000 foot and ~~3,000~~ 2,000 foot radius around blast site.*

In addition to the surveys required under subsection 3-16(b)(1), the user and developer must provide a viable opportunity for a professional pre-blast condition survey to be conducted on all structures and facilities falling within a distance of ~~1,500~~ 1,000 to ~~3,000~~ 2,000 feet from the blast site. Structures and facilities touched by the ~~3,000~~ 2,000 foot radius measurement must be included in the survey.

The professional conducting the survey must provide a written notice to the owner and tenants of the property. This notice must indicate where and when the blasting activity will occur, the reason for the survey, and a local or toll free contact number for purposes of scheduling a date and time for the survey or obtaining additional information. A copy of this notice must be provided to the County.

The notice offering a pre-blast survey must be sent at least 20 days prior to the start of blasting activity via regular and certified mail. Sufficient time must be provided to allow scheduling and completion of all pre-blast condition surveys requested before the blasting activity occurs. Prior to commencement of blasting activity, the user or developer must submit a sworn affidavit to Code Enforcement indicating the notice offering a pre-blast condition survey was sent to all property owners within the designated area and all pre-blast surveys requested are complete. The affidavit must include an attachment identifying the names and addresses used in sending the notices.

- (c) *Post-blast condition survey.*

Upon completion of the blasting allowed under the permit, the user and developer will obtain professional post-blast condition surveys for properties, structures or facilities that are the subject of damage complaints or claims made during the course of the blasting activity. A list of all property owners filing a complaint with the County will be compiled by Code Enforcement.

The professional conducting the survey will contact each property owner in writing, via certified mail, to schedule a mutually convenient date and time for the post-blast survey. The surveys must be completed within 15 days after cessation of the blasting activity. A copy of the condition survey report must be provided to the property owner and Code Enforcement upon completion, but no later than 10 days after the physical survey date.

The Developer must submit a sworn affidavit within 30 days after the cessation of the blasting activity that identifies the location of the properties offered a post-blast condition survey; property owners' names and the mailing addresses used to extend the offer; and whether the survey was completed or refused. No further blasting permits will be issued within unincorporated Lee County for projects in which this developer is a principal, beneficiary, or subsidiary until this affidavit is filed.

(d) *Content of condition survey.* The condition survey must include a written description of the interior and exterior condition of each structure or facility examined. Existing cracks, damage or other defects must be specifically located and described with sufficient specificity to make it possible to determine the effect, if any, of the proposed blasting activity. If significant cracks or damage exist or if the defects are too complicated to describe in writing, photographs must be taken to supplement the survey. In lieu of the written survey report, a good quality videotape survey, with appropriate audio description of locations, conditions and defects may be substituted. A copy, in whatever form created, must be provided to the property owner and Code Enforcement prior to approval for subsequent blasting activity on projects within unincorporated Lee County.

The survey must be kept for a minimum of seven years and be available upon request.

Sec. 3-20. Violations and penalties.

(a) *Intensity violation under 0.50 PPV.* Blasting activity that exceeds the limitations set forth in section 3-8 for PPV or airblast overpressure at the locations specified in section 3-8(a); ~~or, the 80% rule;~~ or, fails to measure and record the blast intensity at the nearest structure not owned by the developer in accordance with sections 3-8 and 3-15 constitutes an "intensity violation" under this article. Intensity violations are cumulative and run against the user, blaster, developer, engineer and total development project (all phases). For example, if a user received an intensity violation for project A and several years later receives an intensity violation from project X, the intensity violation for project X is considered a second violation. Intensity violations will precipitate the following action:

(1) *First violation:*

The following will occur, if the blast intensity violation is above 0.3 PPV and under 0.49 PPV.

- a. A fine of \$5,000 against the user, blaster, engineer and developer, who will be jointly liable for the full amount of this fine. The fine is due and payable upon issuance of the County citation; and
- b. All work under the blasting permit must cease for seven days. Provided, however, blasting activity will be permitted to resume only after the user obtains approval for a modification of the blasting permit that will ensure the blasting intensity does not exceed the intensity limitation set forth in section 3-8(b). The proposed modification must be based upon an investigation and report as to what caused the violation. This report must outline alternatives for remedial action to correct the problem identified by the investigation.

(2) A second violation between .3 PPV and .49 PPV or an Intensity violation over 0.50 PPV. If blasting activity precipitates 0.50 PPV reading or higher on any seismograph monitoring the blasting under the development blasting permit, then the following will occur:

- a. A fine of \$5,000 against the user, blaster, engineer and developer, who will be jointly liable for the full amount of this fine. The fine is due and payable upon issuance of the County citation;
- b. Automatic revocation of the blasting permit;
- c. No further blasting permits will be issued for the development project, including all future phases of the project. Disputes as to the scope of the development project for purposes of this subsection will be decided by the Director; and,
- d. No further blasting permits will be issued to the user, blaster or the company or business entity qualified or associated with the user for a period of 5 years. The fact that a new user is obtained to qualify a company does not eliminate the sanction. The user will not be eligible to qualify any other companies or entities for purposes of blasting in unincorporated Lee County for a period of 5 years. The blaster will not be permitted to act as the responsible blaster for purposes of blasting in unincorporated Lee County for a period of 5 years.

(b) *Non-intensity violation.* Violation of the provisions of this article, other than those applicable to blast intensity, constitute a "non-intensity violation". Non-intensity violations will precipitate the following action:

- (1) Imposition of a fine against the user, blaster and developer, individually or jointly. The fine is due and payable based upon issuance of the County citation. Fine amounts are set forth in the Lee County Administrative Code.

- (2) Automatic suspension of the current blasting permit. The permit may be reinstated at the discretion of the Director if:
 - a. The violation is abated to the Director's satisfaction; and
 - b. The information requested by the Director is submitted and found sufficient by the County.
- (3) Potential revocation of the blasting permit based upon the nature of the violation and the history of violator's compliance.

SECTION TWO: CONFLICTS OF LAW

Whenever the requirements or provisions of this Ordinance are in conflict with the requirements or provisions of other lawfully adopted ordinances or statutes, the most restrictive requirements will apply.

SECTION THREE: SEVERABILITY

It is the Board's intent that if any section, subsection, clause or provision of this ordinance is deemed invalid or unconstitutional by a court of competent jurisdiction, such portion will become a separate provision and will not affect the remaining provisions of this ordinance. The Board further declares its intent that this ordinance would have been adopted if such unconstitutional provision was not included.

SECTION FOUR: CODIFICATION AND SCRIVENER'S ERRORS

The Board of County Commissioners intend that this ordinance will be made part of the Lee County Code; and that sections of this ordinance can be renumbered or relettered and that the word "ordinance" can be changed to "section", "article" or some other appropriate word or phrase to accomplish codification, and regardless of whether this ordinance is ever codified, the ordinance can be renumbered or relettered and typographical errors that do not affect the intent can be corrected with the authorization of the County Administrator, County Manager or his designee, without the need for a public hearing.

SECTION FIVE: EFFECTIVE DATE

The ordinance will take effect upon filing with the Secretary of State.

The foregoing resolution was adopted by the Board of County Commissioners by a motion by Commissioner St Cerny, and seconded by Commissioner Janes and, when put to a vote, the result was as follows:

